2277 QY 1738 ATCGAAGGATTC 2337 Db 30.3 ATCGAAGGATTC 2337 QY 1798 TTTGCAACACAC 2397 Db 36.3 TTTGCAACACAC 2397 QY 1858 AGTTTCTGGTTT 962 Db 42.3 AGTTTCTGGTTT	2457  29  1022  Db  483 CCCAAGAAGTTT  2516  Qy  1978 CAATGCATTCAT  1082  Db  543 CAATGCATTCAT  (	AN-2004  AN-2004  OY  2158 TTTCCATACATA  OY  2158 TTATGTTTGATA  OY  2218 TAATTTTAGGC  OY  2218 TAATTTTAGGC  OY  2218 TAATTTTATGCC  OY  2218 TAATTTTATGCC  OY  2218 TAATTTTATGCC  OY  2218 TAATTTTAGGCC  OY  2218 TAATTTTAGGCC  OY  2218 TAATTTTAGGCC  OY  2238 TAATTCCAGGTCA  OY  2398 CAGACTGCACAA  OY  2398 CAGACTGCACAA  OY  2458 GGTGGTGCACAA  OY  2458 GGTGGTGCACAA	2; Db Qy 1497 Db 62	1557 Search completed: November 152 Job time : 15382 secs 1617 1627 242
	23398 CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT	linear PAT 30-J Frtebrata; Buteleos Hominidae; Homo. prostate cancer and	Query Match  28.4%; Score 1068; DB 6; Length 1128;  Best Local Similarity 98.0%; Pred. No. 1.2e-176;  Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps  1438 CCAAATTTCAAATGCCAACATCTCCCCAACATACCTATTCATCTTTGAGGTGTAAT  4 CTACAAATTTAAATGCAACATCTGCCCATCCAA.TACCTATTCATCTTTGAGGGTAAT  4 CTACAAATTTAAATGCAACATCTGCCCATCCAA.TACCTATTCATCTTTGAGGGTAAT	CIACTCAATAAACTGGTAAGACCAGGACCAGACCCTTTGCTAACCTGACATTTACTTC  63 CIACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC  1558 AATTTTCTTTTTCTATGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC  123 AATTTTCTTTTTCTATGACATGACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA  1618 AATTAATAATTTTTTTTTGACATTGGCTTTTCTGAGAAGAGAAATTGAAAGTGCACAAAATAA  183 AATTAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAA
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0,4 2 0,4 2	RESULT 15 10048 100494252 100505 DEFINITION VECESION VERYWORDS SOURCE SOURCE AUTHORS TITLE JOURNAL FEATURES GOUICGE ORIGIN	Query Ma Best Loc Matches Qy 1	8 8 8 8 8 8 8

2457 2516 1082 TTATATATTTTTTTTGTATAGATACAGTATACGAGTTGAGTATCCCTTAG 2037 2157 2217 2277 2337 2397 1857 1917 1797 842 362 GGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTGGATTTTGGAATA 2097 662 902 962 422 482 ATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA CCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG CTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC agtectcaaaagtttcagatgttaagctggtgatgcagttcatgccag AGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG CTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC CTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG CTAGTTAATTTAACCTGTGACTAGTTATCTCTACGGAAGGTGGATGTGT INGTICABATATTAGTABABITGBABATABABCTTGTGCTTATATTTTG GAGGCTGAACTGAGCCAGGATCTTGCCACACA 2560 

r 18, 2004, 18:25:07

XEYWORDS SOURCE SOURCE Homo sapiens Homo sapiens Homo sapiens Homo sapiens LEKARYOCA; Metazoa; Chordata; Craniata; Euteleostomi BENARROCA; Metazoa; Chordata; Craniata; Euteleostomi Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  AUTHORS Schlegel, R., Endege, W.O. and Monahan, J.E. TITLE Genes differentially expressed in human prostate cancer and thei use JOURNAL Patent: WO 0160860-A 20797 23-AUG-2001; Millennium Predictive Medicine, Inc. (US) FEATURES Location/Qualifiers Source //mol_type="Homo sapiens" //mol_type="Haxon:9606" //do_xref="taxon:9606"	Query Match   28.4%; Score 1068; DB 6; Length 1128; Best Local Similarity 98.0%; Pred. No. 1.2e-176; Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps   Qy	Oy 1558  Db 123  Oy 1618  Db 183  Oy 1678  Db 243	Oy 1738  Db 303  Oy 1798  Db 363  Db 1858  Db 1858	1918 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA GAAGACATAATTGA GAAGACATTATTAATGATATGA GAAGACTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA GAAGAAGTTTTTTTAATGACTACCAGATTGAGAGACAAAAGCCTTAATTGA GAAGACTTAATTGATAATTGA GAATGCATTCATTATATATATTTTTTTTTT	Oy 2098 Db 663 OY 2158 Db 723
123 AATTITICTTITICTATGACATTITIGAGAAGAAATTGAAATTGAAATAGATTCAAA 182 1618 AATTAATAGTTITIGACATTGGCTTTTCTGAGAAATTGAAATTGAAATAA 1677 183 AATTAATAGTTITIGACATTGGCTTTTCTGAGAAATTGAAATTGAAATTGAAATAA 242 1678 AAAAGATGTTTTGAATTATATTGTTTTTTTTTTTTTTT	1858 AGITTCTGGTTTTAAAAITCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTCTTT	2038 ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTTTGGATTTTTGGAATA 209  [	2218 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277  183 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTTCAC 227  2278 TAATTTCAAGTCAGTGCTCAAAAGTTTGAGATGTTAAGCTGGTGATGCAGTATCATGCCAC 333  2278 TATTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAC 2337  843 TATTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG 902  2338 TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGATCATTGAGCCCAGGAGTTTGAGGC 2397  903 TGATCCGAGTACTTTGGGAAAGCCAAGACAGGTGGATCTTTGAGCCCAGGAGTTTGAGGC 2397	2398 CAGACTGCACAACACGGTGAGACCTCGTTTCTACAAATAATAAAAATTTAGCCAGGTGT 245'	CQ488930 1128 bp DNA linear Sequence 20797 from Patent WOO160860. CQ488930.1 GI:41454549

Fri

```
2277
                                                                                                                                                                                                                             2337
                                                                                                                                                                                                                                                                                                                                                           2457
                                                                                                                                                                                                                                                                                                                                                                                          1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1497
                                                                                              2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1498 CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1558 AATITITCITITCIATGIACIGGATATITITGCATATAAACTIGCAGIAATAGTICAAA 1617
                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                           TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC 2397
                                                                                                                                                                                                                                                                                                                           962
                                                                                                                                                                                                                                                                                                                                                                                                                          GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG 2516
                                                                                                                 TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTTAAA 782
                                                                                                                                                                                                                                                           902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 30-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vertebrata; Euteleostomi;
i; Hominidae; Homo.
                                                                                                                                                                                  843 TATTTCAAGTCCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTCATCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACTCAATAAAACTGTGTAAAGACCAGTGACCCAGACCCTTTGCTAACCTGACATTTACTTC
 ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTTTTGGAATA
                                                                                                                                                              TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                             TATITICAAGTCAGTGCTCAAAAAGTTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                            TITCCATACATATAATGAGAGTTGGAAAATGGGGATTCAAGTCTAAATTCAC
                                                                                                                                                                                                                                                                                                                                                           CAGACTGCACACACACTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1023 GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGGTTATTGGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                            TTTCCATACATATAATGAGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schlegel, R., Endege, W.O. and Monahan, J.E. Genes differentially expressed in human prostate cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTGGGAGGTTGAGGCTGAGCTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Ve
Mammalia, Eutheria, Primates, Catarrhini,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28.4%; Score 1068; DB 6; 98.0%; Pred. No. 1.2e-176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 0160860-A 20608 23-AUG-2001;
Millennium Predictive Medicine, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CQ488741 1128 bp DNA
Sequence 20608 from Patent WO0160860.
CQ488741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .1128
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CQ488741.1 GI:41454360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 1102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                2158
                                                                                                                                                              2218
                                                                                                                                                                                                                                                                                           2338
                                                                                                                                                                                                                                                                                                                                                           2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1438
   603
                                 2098
                                                                663
                                                                                                                                723
                                                                                                                                                                                                                             2278
                                                                                                                                                                                                                                                                                                                           903
                                                                                                                                                                                                                                                                                                                                                                                          963
                                                                                                                                                                                                                                                                                                                                                                                                                          2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
CQ488741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gg
                                                                                                                                                                                  g
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                  ₹
                                                                                                                       qq
                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
 6 B
                                                       g
                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1917
                                                                                 30-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTITICITITICIATGIACTGGATATTITIGCATATAAACTIGCAGTAATAGTICAAA 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAAGAAGITITITAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAATGCATTCATTATATATTTTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAG 2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAGAIGCTTGGGACCAGAAGIGITTTGGAITTCAGAITTAITTTTGGAITTTGGAATA 2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243 AAAAAGATGAAATGAAGCATATATATATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                        Schlegel, R., Endege, W.O. and Monahan, J.E. Genes differentially expressed in human prostate cancer and their
                                                                                                                                                                                             Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACAATITTAAATGCAACATCTGCCCATCCAA-TACCTATITCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATTITICITITICIATGTACTGGATATTITIGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183 AATTAATAGTTTTTGACATTGGCTTTTCTGAGAGGAGAAATTGAAAGTGTCACAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAGATGAAATGAAGCATATATATATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Arccaaccarrentariana and an arccaaccarrence arccaaccarrence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTITICIGGITITIAAAAITICAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543 CARIGCALICALIAIAITITITITITIAIAGITACAGIATACGAGITGAGIAICCCITAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo
                                                                                  PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1128;
 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 28.4%; Score 1068; DB 6; Length 1 Best Local Similarity 98.0%; Pred. No. 1.2e-176; Matches 1102; Conservative 0; Mismatches 20; Indels
                                                                                 linear
                                                                                                                                                                                                                                                                                        Patent: WO 0160860-A 20430 23-AUG-2001;
Millennium Predictive Medicine, Inc. (US)
Location/Qualifiers
                                                                CQ488563 1128 bp DNA
Sequence 20430 from Patent WO0160860.
CQ488563
                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                            CQ488563.1 GI:41454182
                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                         1. .1128
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2038
 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                          LOCUS
DEFINITION
ACCESSION
VERSION
SEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                               RESULT 12
                                                                                                                                                                                                                                                                                         JOURNAL
                                                                CQ488563
                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 G G G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

ä

	1296  Qy 1498 CTACTCAATAAACTGTGTAAGACCAGGACCTTTGCTAACCTGACATTTACTT	1356 QY 1558 AATTITCTATGTACTGGATATTITGCATATAAACTIGCAGTAATAGTTCAAA   1558 AATTITTCTATTTCTATGTACGATATATTITTGCATATAAACTIGCAGTAATAGTTCAAA   123 AATTITTCTATGTACTAGGATATTITTGCATATAAACTIGCAGTAATAGTTCAAA	1416 QY 1618 AAITBATAGTTTTTGACCATTGGCTTTTCTGAGAAATTGAAATTGAAAATAA	1476 QY 1678 AAAAAGATGAAATGAAGATATATGTCAATTTTTCAATTTTTTTAGTCAACAGAGA 1600 Db 243 AAAAAGATGAAAGAGAAGAAGAATTTTTTTTTTTTTTT	1536 QY 1738 ATCGAAGGATTCTGTTCAATATTAGTAAAAATTGAAATAAAATGTATATTTTG	1596  QY 1798 TITGCAACACACTAGTTAATTTAACCTGGACTAGTTATCTTACGGAAGGTGGATGTGT	1656  QY 1858 AGTITCTGGTTTTAAAATTCAAGGAAACTGGAAATAATCCATCTAATTATGCTTTTTTTT	1713  QY 1918 CCCAAGAAGTITITIAATGATATGCCAGCTICCTAAITTGGAGACAAAAGCCTTAAITGA	1773 QY 1978 CAATGCATTCATTATATATTTTTTGTATACAGTATACGAGTTGAGTATCCCTTAG	Qy 2038 AIGAGAIGCITGGGACCAGAAGIGTITTGGAITTCAGAITTTTGGAITTTGGAATA 	QY         2098         TTTCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGTCTAATTCATAAATTTCAC	-2004 Qy 2158 TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA	Oy 2218 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC	Qy 2278 TAITICAAGICAGAGAAAAGITICAGATGTTAAGGTGGTGGTGAGTTCATGCCAG 	Oy 2338 TGATCCGAGTACTTTGGGAAGCCAAGACAGGATCTCTTGAGCCCAGGAGTTTGAGGC   Db 903 TGATCCGAGTACTTTGGGAAGCCAAGACCAAGGAGTCTCTTGAGCCCAGGAGTTTGAGGC   Db 903 TGATCCGAGTACTTTGGGAAGCCAAGACCAAGATCTCTTGAGCCCAGGAGTTTGAGGC	Oy 2398 CAGACTGCACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT	QY         2458 GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG           DD         1023 GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG           2;         QY           2517 ACTGGGAGGTTGAGGTTGAAGTTGAGCGAGGATCTTGCCACCACA 2560
1301 AGCTGAACCAATGTGCACTTTCCATATATTGATTTATGTCTTTGCTTGTAACTCCTGTCT 1		1297 TCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGCTCAGAATCAACTCTTTAAA 1 	1357 TATTTTACAGAATTTGGTTTTGGTTACCAATAAGTCTCCACAAAATATATGTCCAAGAAT 1 	1417 CTTGAATTCCAAGCCTGCTCACCAAATTTCAAATGCCAACATCTCCCCATCCAATTACT 1	1477 ATTICATCITIGAGGIGIAATCTACTCAATAAACIGIGIAAGACCAGIGACCAGACCCTT 1 	1537 IGCTAACCTGACATTTACTTCAATTTTTCTTTTTTTTGTACTGGATATTTTTGCATATA 1 	1597 AACTIGCAGTAATAGTICAAAATTAATAGTITITIGACATIGGCTITICIGAGAAGAGA 1 	1657 ATTGAAAGTGTCACAAAATAAAAAAGATGAAATGAAGCATATATAATTGTCAATTT 1 	1714 TTTCAATTTTCTAGTCAACAGAGAATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGA 	1774 AAATAAA 1780           1900 AAAAAA 1906		LOCUS CQ488422 1128 bp DNA linear PAT 30-JAN-200 DEFINITION Sequence 20289 from Patent WO0160860. ACCESSION CQ488422 VERSION CQ488422.1 GI:41454041	Homo sapiens (human) Homo sapiens Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi	FILMATES; CATAKRINI; HOMINIGAE; HOMO. W.O. and Monahan,J.E. expressed in human prostate cancer and the	use  RNAL Patent: WO 0160860-A 20289 23-AUG-2001;  Millennium Predictive Medicine, Inc. (US)  Location/Qualifiers	e 11128   / Lanism="Homo sapiens"   molanism="unassigned DNA"   db_xref="taxon:9606"	IGIN Query Match Best Local Similarity 98.0%; Pred. No. 1.2e-176; Matches 1102; Conservative 0; Mismatches 20; Indels 2; Gaps

216

343

283

276

403

523 456 583 516 643 576 703

```
1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTGACTICTIAAGICTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGAA 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1177 AGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTCTTTGCTTGTAACTCCTGTCT 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      966
                                                                                                                                                                                                                                                                                                                         AATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAA 336
                                                                                                                                                                                                                                                                                                                                                                            404 AATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGAATTTAGAGAA 463
                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGICAGAGACAGAATAIGCCCTICITAGGACTICIGITAGIAGGCCTIGITCCTGCACC 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            881 GGACCCCCTTCTGGGCCCAAGGAGCCTCAGATGATCTTGAAAGACTGAATTCTGGCCATG 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAACTCTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGAC 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAAAATATTCTATGTGTTTTTGCTTGTAAAGTTTGAGGACCATGGAGGTGATAAAAAA 696
                                          GCATGAAACATTCCTTTCTGGCTAAAGTTTACAAATATTATTATTATATTCCTTAGG
                                                                                                                                                    AGGAAAAGGAAGTTTCATCCATTCTAATCAGGAAAACGAGAATGGCAGTGGTTCT
                                                                                                                                                                                                                                                   GAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCGGAGGTCTTCCCTGAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTATTCTTGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGAGCATGATTACGAAGTTGTGTTCCACACTAAAACCCTCAAGCCGCTTTATCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCATGAAACATTCCTTTCTGGCTAAAGTTTTAGAAATATTATCTTATTATATATCCTTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAAAATATTCTATGTGTTTTTGCTTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAA
                                                                                                                                                                                                                  GAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCCATCAGAGATCCTCCCTGAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAACTCTGAAATGTGGCATCTCTGTGGTTTTAGGTGGAATCATAGAAATTGAAACAAT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCAACCTGACTCTGGTGGATCACTCGCTGTCTGAGTGATTCCATCTATGAGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTACATAACAGAGACCTTGGTTTCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAACTITGAAICTACCTAIGACCTGIAAGCTCTCCTGCTICAAGAICTIGCCTCTITA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGAGGAAAGAAAACGGCAGGAAATGACTACATTTGAAAAGAAAACTTCAAGATCAAGAT
                                                                                                          AAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGAGCATGATTATGAAGTTGTGTTTCCACACTAAAATCCTCAAGCTGCTTTATCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGCAATGAAGACAATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTITICITAGGACAATAATGTAAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCTTAGGACAATAATGTAAATGAAATAAATTCCTAATCCCCCTGACTAACTGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACCCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAATTCTGGCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 817 ATAGGAAGGAAGTGAGACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGACCAGGATGAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCAACCTGACTCTGGTGTAGATCACACCTGTCTGAGGGATTCCATCTATGAGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GICTATGTAACAAAGACCTTGGTTTCCACAACCCCTTTATTTTTAGCTAAAGCATTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGAC
97
                                                     224
                                                                                                       157
                                                                                                                                                            284
                                                                                                                                                                                                               217
                                                                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                                                                                       277
                                                                                                                                                                                                                                                                                                                                                                                                                                 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1181
B 8
                                                                                    à
                                                                                                                                            qq
                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Liab host:

Wector:

Wector:

Wector:

R. Sitel:

Description: 1st strand cDNA was primed with an oligo(dT) primer
[AngredCCTTTTTTTTTTT]; double-stranded cDNA was synthesized
using specific 5' and 3' primers and amplified by PCR. The PCR
product was digested with Sil and size selection was performed to
exclude fragments <1.5kb.The Sfil-digested PCR product was cloned
into distinct Drails sites of pmr188-FD3. XhoI sites just outside
the Drails sites can be used to isolate the cDNA insert. Libraries
were constructed by oligo-capping method
"CSugano et al.," Institute of Medical Science, University of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="MTTFERKLODQDKKSKEVSSISNGENENGSGSEEVCYTVINHIP
HRRSSLSSNDDGYENIDSLTRKVREFRERSETEYALLRTSVSRPYSCTHEHDYEVVLP
H"
                                                                              PRI 19-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Infectious Diseases, Division of Genetic Resources; 23-1, Toyama 1-chome, Shinjuku-ku, Tokyo 162-8640, Japan E-chome, Shinjuku-ku, Tokyo 162-8640, Japan E-mail:khashi@nih.go.jp, URL:http://www.nih.go.jp/yoken/genebank/, Tel:81-3-5285-1181)
Lab host: TOP10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    υĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCAAGAAAGGAAACCCA 96
                                                                                                                                                                                                                                                                                                                                                                                       Osada, N., Hida, M., Kusuda, J., Tanuma, R., Hirata, M., Hirai, M., Terao, K., Suzuki, Y., Sugano, S. and Hashimoto, K.
Prediction of unidentified human genes on the basis of sequence similarity to movel Term cynomolgus monkey brain (er) Genome Biol. 3, research0006.1-0006.5 (2001)

(bx) Genome Biol. 3, research0006.1-0006.5 (2001)

(cx) Genome Biol. 3, researc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                           AB060908
Macaca fascicularis brain CDNA clone:QtrA-14007, full insert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40.0%; Score 1504.6; DB 9; Length 1924;
.larity 92.5%; Pred. No. 7.3e-253;
Conservative 0; Mismatches 124; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="temporal lobe right"
/clone_lib="macaque brain cDNA library QtrA"
                                                                                                                                                                             AB060908.1 GI:13874585
oligo capping; fis (full insert sequence)
Macaca faccicularis (crab-eating macaque)
Macaca fascicularis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
/product="hypothetical protein"
/protein id="BAB46903.1"
/db_xref="GI:13874586"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Macaca fascicularis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stom primer used for sequencing
5' end primer (CTTGGTCTAAAAGCTGGG)
end primer [CGACCTGCAGCTCGAGCACA] )
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9541"
/clone="QtrA-14007"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dev stage="adult"
                                                                                                                                                                                                                                                                                                                                          Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .. .1924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rokyo).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Custom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simi
Matches 1616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37
                                                                      LOCUS
DEFINITION
                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
                RESULT 10
AB060908
                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
```

760

```
TITAATGATITATGICTTTGCTTGTAACTCCTGTCTCCTAAAATGTATAAAAGTAAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441 AATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCAATAAACTGTGTAAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTCTTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAAT
                                                                                                                                                     TTACCAATTAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATTICAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITICITITICIATGIACIGGAIAITITIGCAIAIAAACIIGCAGIAAIAGIICAAAAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA
                                                                                                                                                                                                                                                          Trigrandecerricecritings and trigranded and an arrange of the strength of the s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCACAACCCCTTTATTTAGCTAAAGCATTCTTTCTACTGACTTCTTAAAGTCTTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAAGCTTAAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141 GTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGACCTGACCCCCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             greaccreaccreaccacacarrrrcreagaccrecreagagacreagagagarrccaaggccar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTACAGAATTTGGGTTTTGG
                                                                                                                             TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAAACTTTCTTAGGACAATAATGTAAAA
                                                                                                                                                                                                                                                                                                                                     CCTCAGATGAACCTGAAAGACTGGATTCTGGCCATGATAGGAAGGGAGGTGAGACACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                             601
                                                                                                                                                                                  695
                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                     755
                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                        815
                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  995
                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                à
                                                                                                                                                                             g
                                                                                                                                                                                                                                  8
                                                                                                S Isogai, T. and Yamamoto, J.

S Isogai, T. and Yamamoto, J.

E Sogai, T. and Yamamoto, J.

Direct Submission

Bubmitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7

Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

(E-mail:genomics@hri.co.jp, Tel:81-438-52-3986)

NEO human cDNA sequencing project supported by Ministry of

Economy, Trade and Industry of Japan; cDNA full insert sequencing:

Research Association for Biotechnology (RAB); cDNA library

Construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGGTGGCTATGAGAACATT 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541 AAGTITAGAATATTATCTTATTATATATCTTAGGCAACTCTGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTTTAGAAATATTATCTTATTATATATCTTTAGGCAACTCTGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGACTACATTTGAAAGAAAACTTCAAGATCGAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCAGACTCTGGGGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTAGGACTTCTGTTTAGTAGGCCTTGTTCCTGCACCCATGAGGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTICIAAICAGGAAAACGAGAAIGGCAGIGGIICTIGAAGAAGAGIGTGCIACACIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. and Isogai, T. NEDO human cDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mknAm"
/do_tef="taxon:9606"
/clone="NOVAR2000710"
/tissue_type="ovary"
/clone_Tib="NOVAR2"
/dev_stage="adult"
/note="cloning_vector: pME185FL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 44.5%; Score 1673.4; DB 9
Best Local Similarity 99.9%; Pred. No. 2.6e-282;
Matches 1674; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                  Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              515
                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                중
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

d

셤

ò a

ò

ò 요 상 임

1260

1294

1020

960 994

934

780 814 840 874 900 1054

1080 1114 1140 1174 1200 1440 1474 1500

1380 1414 1620

935 GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT 961 CACACACTGTCTGAGGGATTCCATCTATGACACTTTGTCTACATAACAGAGACCTTGGTT	OY   1021 TCCACAACCCCTTATTTTAGCTAAAGATTCTTTTCACTGACTTCTTAAGTCTTTAGA 1080	1141 GTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA	1201 TTTAATGATTTATGTTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAGTAAAGG 1235 TTTAATGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAGTAAAGG	1261 GTGACCTGACCACCTCAGGCACATTTCTCAGGACCTCCTGAGGCTTTTCCCAGGCCAT	OY 1321 GGTAAGTCATGTGGCTCAGAATCAACCTCTTTAAATATTTACAGAATTTGGGTTTTGG 1380	Qy 1381 TTACCAATAAGTCTCCACAAATATATGTCCAAGAATTCTCAATTCCAAGCCTGCTCACCA 1440	QY 1441 AATTCAAATGCCAACATCTCCCCATCCAATTACCTATTTGATCTTGAGGTGTAATCTA 1500  DD 1475 AATTTCAAATGCCAACATCTCCCCAATTACCTATTTCATCTTTGAGGTGTAATCTA 1534	OY 1501 CTCAATAAACTGTGAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT 1560	Qy 1561 TTTCTTTTCTANGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAAAT 1620  Db 1595 TTTTCTTTTTCTANGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAAAAT 1654	QY 1621 TAATAGTTTTTGACATTGAGAGAGAGAAATTGAAAGTGTCACAAAAT 1675 		DEFINITION Homo sapiens cDNA FLJ41804 fis, clone NOVAR2000710. ACCESSION AK123798. VERSION AK123798.1 GI:34529425 KEYWORDS oligo capping; fis (full insert sequence).	_	REFERENCE 1 AUTHORS Suzuki,O., Sasaki,N., Actsuka,S., Shoji,T., Ichihara,T., Shichata,N., Matsumcto,K., Hirano,M., Sano,S., Nomura,R., Yoshikawa,Y., Matsumura,Y., Moriya,S., Chiba,E., Momiyama,H.,	Onogawa,S., Kaeriyama,S., Satoh,N., Matsunawa,H., Takahashi,E., Kataoka,R., Kuga,N., Kuroda,A., Satoh,I., Kamata,K., Takami,S., Terashima,Y., Watanabe,M., Sugiyama,T., Irie,R., Otsuki,T., Sato H. Wakamata, a. Tehisi S., Samamato, A. Taono, V.	Kawai-Hio, Y. Saito, K., Nishkawa, T., Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M., Kikuchi, H., Kanda, K., Wagatsuma, M., Murakawa, K., Kanehori, K., Takahashi-Fujii, A.,
FEATURES Location/Qualifiers source 11709 /organi="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"	Query Match Best Local Similarity 99.9%; Score 1673.4; DB 6; Length 1709; Best Local Similarity 99.9%; Pred. No. 2.6e-282; Matches 1674; Conservative 0; Mismatches 1; Indels 0; Gaps 0; Qy 1 GAGAAACGACGAGTCACTGTGAAAAGATTATCTCCTGCGAAAACTCCTG 60 Db 35 GAGAAACCAGTCAAAAGATAAACAATGAAAATAATCTCCTAAAAAAAA	61 GGAGAGAATCAAAAGAAGCCCAAGAAAGGAAACCCAGATGAGGAAAGAAA	OY 121 ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC 180	QY 181 ACTICTAAICAGGAAAACGAGAAIGGCAGTGGTTCIGAAGAAGIGGGTACACTGTGTT 240	Qy 241 AATCACCCCATCAGAGATCCTCCCTGAGCTCCAATGATGGCTATGAGAACATT 300	Qy 301 GACTCCCTCACAAGGAAAGTCAGACAGTTTAGAGAAAGGTCAGAGAACAGAATATGCCCTT 360 	TTGTG 4	421 TITCCACACTAAAATCCTCAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA 41	90-05 0-05 0-05 0-05 0-05 0-05 0-05 0-05	CTCTG	OY 601 IGGCTTAGGIGAAATCAIAGAAATTGACACAAIGACCIAAAAIATTCIAIGTGTTTTTGC 660	Oy 661 TIGTAAAGTITGAGGACAIGGAGGTGAIAAAAAAACTITCTIAGGACAAIAAIGIAAAA 720 	OY 721 TGAAAATAAATTICTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA 780 	QY     781     CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGTGAGACACACCC     840       Db     815     CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGTGAGACACACCC     874	QY 841 TIGITATACCCTTCCCTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT 900	1 GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACTGACTTGGTGTAGAT

GAGA 780  GAGA 803  CACC 840  CACC 840  CACC 863  GACT 923  GACT 923  GACT 923  GACT 923  GACT 1020  GGTT 1033  AACG 1260  AAACG 1260  AAAACG 1260  AAAAACG 1260  AAAACG 1260  AAAAACG 1260  AAAAAACG 1260  AAAAAACG 1260  AAAAAACG 1260  AAAAAAAAAAAAAAAAAAAAAAA		2041 AGAIGCTTGGGACCAGAAGTGTTTTGGATTTTTTTTTTTT	2161 TGTTGATATACCGAATAGCCTGAAGGTAATTTATACAATATTTAAATAA  [	2281   TTCAAGTGGTCAAAAGTTTCAGATGATGATGATGATGATGATGATGATGATGATGATGAT	2401 ACTGCACAACACGGGACACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGTGGT 2460		CQ842314 1709 bp DNA linear PAT 02-AUG-2004 LOCASION CQ842314 161:50894101 ACCESSION CQ842314 GI:50894101 CQ842310N CQ842314. GI:50894101 CQ842314 CQ842311 CQ842314 CQ842314 CQ842314 CQ842314 CQ842311 CQ842314 CQ8423
	NGAGA NGAGA NGAGA NGACC NGACC NGACT NGACT NGACT	rggtt        rggtt rtaga	ACCT 1140		rrigg rrigg rrigg	ACCAAT CCAAT CCAAT	1620 1643 1680 1703 1740 1800 1823

g

ò g ò q

à

g

ò

ò

```
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAL Plates 32 Row: b Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21687148.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMACB:1109064"
/tissue type="Bone marrow, acute myelogenous leukemia"
/clone_lib="NHH MGC_S5"
/lab host="NHH10B"
/note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAACCGAGTCACTGTGAAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTAGGACTTCTGTTAGTAGGCCTTGTTCTTCCTCCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                144 AIGACTACATTIGAAAGAAACTICAAGAICAAGAIAAGAAAAGCCAAGAAGITICATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATCACATCCCCCATCAGAGATCCTCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGACAGAAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTICIAAICAGGAAAACGAGAAIGGCAGIGGIICIGAAGAAGIGIGCIACACIGICAII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204 ACTICIAAICAGGAAAACGAGAAIGGCAGIGGIICIGGAAGAAGIGIGCIACACIGICATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTAGGACTICTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTTTAGAAATATTATCTTATATATATCCTTAGGCAACTCTGGATATGTGGCATCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    564 AAGITIAGAAATAITATTAITAIATATCCTIAGGCAACTCTGATATGTGGCCATCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCTTAGGTGAAATCATAGAAATTGACAATGACCTAAAATATTCTATGTGTTTTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624 TGGCTTAGGTGAAATCATAAATTGACACAAAGACCTAAAATATTCTATGTGTTTTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIGIAAAGTITIGAGGACATGGAGGTGATAAAAAAAAACTITICTTAGGACAATAATGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TIGIAAAGITIGAGGACAIGGAGGIGATAAAAAAAAAACITICITAGGACAATAAIGTAAAA
         contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurac
Madan, Stephanie Rodrígues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 2604.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                   1. .2648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 2606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 2648)

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.L., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Alteschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.J., Wang, J., Hsieh, F., Diatchenko, L., Matuslana, K., Earmer, A.A., Rubin, G.M., Hong, L., Scheetz, T.E., Brownstein, M.J., Usdin, T.E., Toshinyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Male, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helle, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Fahey, J., Hellen, E., Ketteman, M., Madan, A., Sodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Butterfield, Y.S., Krzywinski, M., Touchman, J.W., Green, E.D., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A., Schein, J.E., Jones, S.J. and Marra, M.A., Wanner, A., A., A., Manner, A., A., A., Manner, A., Schein, J.E., Jones, S.J. and Marra, M.A.
                                                                                                                      2359
                                                                                                                                                                   3592
                                                                                                                                                                                                                                                                                                                                                3712
                                                                                                                                                                                                                                                    GTAGTTGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAA 3652
                                                                                                                                                                                                                                                                                                                                                                   01-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (19-FEB-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
TCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTA
                                                                    TAAGGCTTCTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTTAATGTTCTATCA
                                                                                                                                                                                                                                                                                       cDNA Library Preparation: CLONTECH Laboratories, Inc. CNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Institute for Systems Biology http://www.systemsbiology.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human and mouse cDNA sequences
Proc. Narl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bp mRNA linear PRI (cDNA clone IMAGE:4109064).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                      TAAATGAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2178 TAAATGAATAAAGCGACTACAAA 2156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BC024174 2648
Homo sapiens LOC148823, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC024174
BC024174.1 GI:18848218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 2648)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg, R.
                                                                                                                 2418
                                                                  3473
                                                                                                                                                                                                         2358
                                                                                                                                                                                                                                                    3593
                                                                                                                                                                                                                                                                                                 2298
                                                                                                                                                                                                                                                                                                                                           3653
                                                                                                                                                                                                                                                                                                                                                                                      2238
                                                                                                                                                                                                                                                                                                                                                                                                                                   3713
                                                                                                                                                              3533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
BC024174
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
```

o;

Gaps

09 83 180

203

300

323

360

383

420 443

240

263

480

503

540

ä

Gaps 1; 232

```
ATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATG 5478
                                                                                                                                                                                                                           5597 adaacarrcaccaccacaagcaaagrcagacagrrrragagaaagcrcagagaar 5538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTCTCTTTTGTGCTTGGCAGGAAAACGAGAATGGCAGTGGTTCTTGAAGAAGTGTGCTACA
                                                                                                             CTGTCATTAATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGGCTATG
                                                                                                                                                   cretcarraarcaccarcccarcagacarccrectcagecrecaargargargecrare
                                                                                                                                                                                                                                                                                                                                                                  AAGTTGTGTTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGGCTAAAGTTTAGAAATATTATTATTATATATATATCTTAGGCAACTCTGATATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTAAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAGACTGAAGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTGGTTTCCACAACCCCTTTATTTTTACGTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                     TTTCATCCACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGCTACA
                                                                                                                                                                                     AGAACATTGACTCCCTCACAAGGAAAGTGAGACAGTTTAGAAAAGGTCAGAGACAGAAT
                                                                                                                                                                                                                                                                 ATGCCCTTCTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATG
                                                                                                                                                                                                                                                                                                                                            AAGTTGTGTTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                      ATGCAGAATAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGGCTAAAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAAAATATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCTCTGTGGCTTAGGAATCATAGAATTGACACAATGACCTAAAATATTCTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GITTITIGCTIGIAAAGITIGAGGACAIGGAGGIGAIAAAAAAAAACITICTIAGGACAAIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTAAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAGAGCCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACACACCTTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACACAGGATGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTAGATCACACACTGTGTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTGGTTTCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCNAGACAACTTTGAATCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTITICCATITAATGATITATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC
 Indels
25;
Mismatches
.;
Conservative
3537;
                                                                                                                                                                                                                                                                                                      5537
                                                                                                                                                                                                                                                                                                                                                                                                                      473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4877
                                                                       5717
                                                                                                             233
                                                                                                                                                   5657
                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                                                                          413
                                                                                                                                                                                                                                                                                                                                                                                5477
                                                                                                                                                                                                                                                                                                                                                                                                                                                        5417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1193
                                                                                                                                                                                         293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    953
Matches
                                                           g
                                                                                                   ò
                                                                                                                                           셤
                                                                                                                                                                                   8
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                               NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 141268;
         Sequencing vector: plasmid, 0¢
Chemistry: Dye-primer ET; 100¢ of reads
Chemistry: Dye-primer ET; 100¢ of reads
Chemistry: Dye-terminator Big Dye; 0¢ of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 138356 bases at least Q40
Consensus quality: 138356 bases at least Q20
Insert size: 142000; agarose-fp
Insert size: 142000; agarose-fp
Insert size: 140368; sum-of-contigs
Quality coverage: 4.64 in Q20 bases; sum-of-contigs
Quality coverage: 4.81 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                        31377: contig of 31377 bp in length 31477: gap of unknown length 63011: contig of 31534 bp in length 63111: gap of unknown length 64845: contig of 1734 bp in length 64845: gap of unknown length 67606: contig of 2661 bp in length 67706: gap of unknown length 7764: contig of 9968 bp in length 7774: gap of unknown length 7774: gap of unknown length 89256: contig of 11482 bp in length 89356: gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89256: contig of 11482 bp in let 257 89356: gap of unknown length 3357 100400: contig of 11044 bp in let 401 100500: gap of unknown length 501 111915: contig of 11415 bp in let 112015: gap of unknown length 016 125713: contig of 13698 bp in let 125713: contig of 13698 bp in let 125813: gap of unknown length 114 125813: gap of unknown length 1158813: contig of 13655 bp in let Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .31377
/note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31478 .63011
/note="assembly_name:Contig11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="assembly_name:Contig3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="assembly_name:Contig4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="assembly_name:Contig8"
125814. .141268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="assembly_name:Contig9
clone_end:SP6
vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 3511.6;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="RP11-115C4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .141268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   112016
125714
125814
                                                                                                                                                                                                                                                                                                                                                                                                                31378
31478
63012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63112
64846
64946
67607
67707
77675
77775
89257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100401
```

1012

4938

952

4998

892

4878

1072 4818 1132

> misc\_feature misc\_feature misc\_feature

misc\_feature misc\_feature misc\_feature misc\_feature misc\_feature misc\_feature misc\_feature

source FEATURES

1192 4698 1252

4697

5418

472

5598

352

412

5358

532

5298

592

5238

652

5178

712

5118

832

135241

135301

3532

135481

3652

3712

```
TAAGGCTTCTTTTAGTCATTATAATATTTTTTGAGATTCATCTATGTTTAATGTTCATCA
                                                                                                                                                                                                                                                                                                                                             135062 GAATCATTGCTGTATAAGTGCTTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGC
                                                                                                            TAAGGCTTCTTTTAGTCATTATATATTTTGAGATTCATCTATGTTTAATGTTCTATCA
                                                                                                                                                                                                                                                                                                                                  GTAGTIGTACATCTTGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAA
                                                                                                                                                                                                                                                                                                                                                                                TCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTA
                                                                                                 TTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTA
                                                                                                                                               TTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAACACGTACATCCTCCCAGAAAGTT
                                                    ATATAAATATTTGAACATTTTACATTGTTTATATTTTTAATCAGTTTTACTCAAGTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence of Homo sapiens clone Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens chromosome 1 clone 10 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                135602 TAAATGAATAAAGCGACTACAAA 135624
                                                                                                                                                                                                                                                                                                                                                                                                                             3713 TAAATGAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Primates;
1 (bases 1 to 141268)
Waterston, R.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AC074365.5 GI:10280935
HTG; HTGS PHASE1; HTGS_DRAFT.
HOMO sapiens (human)
                                                                                                                                                                                             3413
                                                                                                                                                                                                                                                                                      3533
                                                                                                                                                                                                                                                                                                                                                                                3653
                                                                             135122
         3173
                                                       3233
                                                                                                   3293
                                                                                                                          135182
                                                                                                                                                 3353
                                                                                                                                                                                                                                         3473
                                                                                                                                                                                                                                                                                                             135422
                                                                                                                                                                                                                                                                                                                                   3593
                                                                                                                                                                                                                                                                                                                                                          135482
                                                                                                                                                                                                                                                                                                                                                                                                       135542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AC074365/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                            q
                                                                           셤
                                                                                                                      g
                                                                                                                                                                g
                                                                                                                                                                                       ò
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                à
                                                      à
                                                                                                 à
                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCCAATTTTAGG 134761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134222
                                                                                                                                                                                                                                                                            134342
                                                                                                                                                                                                                                                                                                                          134402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                134581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            134641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTCTTATGCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTTGCA 134701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134881
134282
                                                                                                                                                                                                                                                                                                                                                                                                                  13452
                                                                                                                                                                                                                                                                                                                                                2572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3052
                                                                                                                2272
                                                                                                                                                            2332
                                                                                                                                                                                                                                                     2452
                                                                                                                                                                                                                                                                                                   2512
                                                                                                                                                                                                                                                                                                                                                                                            2632
                                                                                                                                                                                                                                                                                                                                                                                                                                         2692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGICITCIGGIGGITCACCAIAAGCCACAGAGAGGICITAATCITTCCGAGAICTAG 3112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITITCAGCAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAATA 3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2752
                                                                                                                                                                                                          2392
                                                                                                                                                                                                                                                                                                               134343 GGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGTGAGGTAGGATGTT
                                                                                                                                                                                                                                                                  TGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                         Arcticagatiaggatiticaaccigiacigaccititiagicatigacaagcatiaatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATT
                                                                                                                             134163 GTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCTGGTGTTCAT
                                                                                                                                                                                                                              134223 GCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTT
                                                                                                                                                                                                                                                                                                                                                TGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACCACTTCCAGCTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAGGTGGACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCTTATGCCCTCTTGTGGGGGATTTTAATGTGCGGAAGGGAAACAATAGAATTTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCAATTTTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATGACAAAATTTTTTACTTTTCGTCTGCCTTTGTAGCTGTTTTATGATATAAATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATTTGTAATAAAATTAATTTTGAGTAACAATCTGGAATTATCAGAGAAGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATTTGTAATAAATTTTAATTTTGGGTAACAATCTGGAATTATCAGAGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCAATAGGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATC
                                                                   TICACITAIGITIGATATACACCITAICTGAATAGCCTGAAGGTAATTITATACAATAT
                                                                                                                TTAAATAATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGT
                                                                                                                                                             GTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAAGCTGGTGATGCAGTTCAT
                                                                                                                                                                                                    GCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTT
                                                                                                                                                                                                                                                     GAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCA
                                                                                                                                                                                                                                                                                                   GGTGTGGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTT
                                                                                                                                                                                                                                                                                                                                                                                             CAACAGAGTGAGCCCTGTCTCAAAAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCTTCAGATTAGGGATTTTCAACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATAGGTGGACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGA
                      GAATATTTCCATACATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3113
                                                                                                                                                                                                          2333
                                                                                                                                                                                                                                                      2393
                                                                                                                                                                                                                                                                            134283
                                                                                                                                                                                                                                                                                                   2453
                                                                                                                                                                                                                                                                                                                                                 2513
                                                                                                                                                                                                                                                                                                                                                                      134403
                                                                                                                                                                                                                                                                                                                                                                                             2573
                                                                                                                                                                                                                                                                                                                                                                                                                   134463
                                                                                                                                                                                                                                                                                                                                                                                                                                          2633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                134522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134942
                                                                    2153
                                                                                                                 2213
                                                                                                                                                             2273
                      2093
                                                                                          134043
                                                                                                                                      134103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6 8 6
                                                                                                             ò
                                                                                                                                  g
                                                                                                                                                           δ
                                                                                                                                                                             g
                                                                                                                                                                                                    $ A
                                                                                                                                                                                                                                                   Q
Pp
                                                                                                                                                                                                                                                                                                 8 6 A 6
                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                      ö
                                           g
                                                                   ઠે
                                                                                     g
```

DNA linear HTG 23-SEP-2000 RP11-115C4, WORKING DRAFT SEQUENCE, Louis, Craniata, Vertebrata, Euteleostomi, Catarrhini, Hominidae, Homo. Sequencing Center, Washington 4444 Forest Park Parkway, St. Waterston, R.H.
Direct Submission
Submitted (29-JUL-2000) Genome Sequencing Center, Washingt University School of Medicine, 4444 Forest Park Parkway, SMO 63108, USA
On Sep 23, 2000 this sequence version replaced gi:9838075.

	133 133 133 133 133 133 133 133 133 133	1973 ALIGACARICCATATATATTTTTTGTATACGTAACGAGTTGAGTATCC 2032 133863 ATTGACAATCATTATATATTTTTTTTTTTTACGTTACAGTATCGAGTTGAGTATCC 2032 2033 CTTAGATGAGTGCTTGGGACCAGAAGTGTTTTGGATTTCAGATTTATTT
8 6 8 6 8 6	6	3 a 3
Center: Wellcome Trust Sanger Institute Center code: SC Web Site: http://www.sanger.ac.uk Contact: humquery@sanger.ac.uk Contact: humquery@sanger.ac.uk	Query Match Best Local Matches 354 132063 132123 132123 132243 132243 132243 132243 132243 132243 132243 132263 132663 132663 132663	OY 893 ATAAGACTGATGAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGGTTTG 952

```
/proteIn_id="BAC85873.1"
/bb xref="G1:34530325"
/tabslation="MVMLEDSNSSTGCGARNCVECLVFLSVLGCQSERKGQWRTQQAG
FWLRAGRRASSETWBEGTLLIDFQSFELPLAARGWQEHEPVVRCNVLPHAFSSWCFGQ
NFPKWSETQELRNRVTVKRWEIISCENSGRK"
3915 TAGCAATGTACCCTTTCCATATTTATTTTGTGTGTAAAGGCTTCTTTTAGTCATTATAA 3974
                                                                                                                                                                                                                                     PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                      Ninomiya,K., Wagatsuma,M., Kanda,K., Kondo,H., Yokoi,T.,
Kodaira,H., Furuya,T., Takahashi,M., Kikkawa,E., Omura,Y., Abe,K.,
Kamihara,K., Katsuta,N., Sato,K., Tanikawa,M., Yamazaki,M.,
Sugiyama,T., Irie,R., Otsuki,T., Sato,H., Wakamatsu,A., Ishi,S.,
Yamamoto,J., Isono,Y., Kawai-Hio,Y., Saito,K., Nishikawa,T.,
Kimura,K., Yamashita,H., Matsuo,K., Nakamura,Y., Sekine,M.,
Kikuchi,H., Murakawa,K., Kanehori,K., Takahashi-Fujii,A.,
Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S.,
NBDO human cDNA sequencing project
                                                                                                                                                                                                                                                                                                                                 Chordata; Craniata; Vertebrata; Buteleostomi;
Primates; Catarrhini; Hominidae; Homo.
                                                                                                   4035 AGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCAACCTGATGATGGATATGTAGG
                                                                                  3617 AGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGG
                                           3975 TATTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTACTTGTCTC
                            TATTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTACTTGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 4136;
                                                                                                                                                                                                                                       mRNA linear
clone BRACE3002390
                                                                                                                                                       4095 ATATITIABATITITIGACAITATGAATAAAGIGGCTATAAAAIG
                                                                                                                                        3677 ATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 9;
                                                                                                                                                                                                                                     AK124520 mRNA AK124529 fis, clone BRAN AK124520 fis, clone BRAN AK124520 AK124520.1 GI:34530124 AK124520.1 GI:34530124 Goligo capping; fis (full insert sequence) Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136. .537
/note="unnamed protein product"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 3590;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95.4%;
99.3%;
                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa,
Mammalia, Eutheria,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                               3557
                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                             RESULT 4
AK124520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                     q
                                                                                    à
                                                                                                             g
                                                                                                                                        ð
                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTA 3376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCAATGTACCCTTTCCATATTTATTTTGTGTGTGTAGGCTTCTTTTAGTCATTATAA 3556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTT 3614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCACCAGTCCTGGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGATATTTG 3496
                                                                                                                                                                                                                                          3134
                                                                                                                                                                                                                                                                                              3194
                                                                                                                                                                                                                                                                                                                         2836
                                                                                                                                                                                                                                                                                                                                                                                2896
                                                                                                                                                                                                                                                                                                                                                                                                          3314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAAATATTTGAACATTTTACA 3256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rgaagagagagagacacgracarccrccagaagrrccacagrgcrccrrrrrcccrgagr 3854
     2955 CCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCTGTCTCAAAAAA 3014
                                                                                                                                                       TGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACATTTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGITIAIAITITIAAICAGITITIACICAAGIGIGATIAIAIACAAGAAAAIGIAACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3195 TITAATGTGCGGAAGGGAACAATAGAAATTTTGCAATTCTAGAAAGTCATTCTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                               AATATGTCAGTCCTGTAGATATTAGCCAATTTTTAGGAAAATGACAAAATTTTTTACTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                      3017 TGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGT
                                                                                                                                                                                                                                                                                             3135 TTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTATGCCCTCTTGTGGTGAT
                                                                                                                                                                                                                                                                                                                         TITAATGTGCGGAAGGGAAACAATAGAAATTTTGCAATTCTAGAAAAGTCATTCTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                  <u> AATATGTCAGTCCTGTAGATATTAGCCAATTTTAGGAAAATGACAAAATTTTTTACTTTT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCACAGCAGATGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAG
                                                             CCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTC----AA
                                               GTACTCAGGAGGCTGAGGTAGTAGTTGTTTTGAGACTGGGGGGTTGAGGCTGAACTGAG
                                                                                                                                                                                                               CTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3437
                                                                                                                                                           2597
                                                                                                                                                                                      3015
                                                                                                                                                                                                                                                                                                                         2777
                                                                                                                                                                                                                                                                                                                                                                                  2837
                                                                                                                                                                                                                                                                                                                                                                                                             3255
                                                                                                                                                                                                                                                                                                                                                                                                                                        2897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3497
                                                                            2895
                                                                                                      2542
                                                                                                                                                                                                                2657
                                                                                                                                                                                                                                          3075
                                                                                                                                                                                                                                                                      2717
                                                2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    යි යි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                  g
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                         셤
                                                                                                                              셤
                                                                                                                                                        ò
                                                                                                                                                                                                               ò
                                                ò
                                                                                                      ò
```

	NA linear La, Vertebrata; hini; Hominidae akamatsu,A., Sa akia,R. ; iy (JP)	Ouery Match   95.4%;   Score 3590;   DB 6;   Length 4136;     Best Local Similarity   99.3%;   Pred. No. 0;     Matches 3617;   Conservative   0;   Mismatches   20;   Indels   5;   Gaps   1;     Qy
2414 TGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTATGTTTGATATACCCTGAACACGTT 2241 2182 GAATAGCCTGAAGGTAATTTTATACAATATTTTAAAATTATTATGCCTGAACACGAGTT 2241 2474 GAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTATTATGCCTGAACAGAGTT 2533 2242 TGCCGCATTGGACCTTCAGAAGCAGAATATTTTAAATAATTTTATGCCTGAAACAGAGTT 2533 2302 TTTCAGATGTTAAGCTGAAGCAGAAGTGCACTATTTCAAGTCAGTGCTCAAAAG 2301 2534 TGCGCACATTGGACCATCAGAAAGCAGAACTCATGACTCAGTGCTCAAAAG 2593 2302 TTTCAGATGTTAAGCTGGTGATCATGCCAGTGATCCAGTGCTCAAAAG 2593 2302 TTTCAGATGTTAAGCTGGTGATCATGCCAGTGATCCAGTGATCCA 2653 2304 TTTCAGATGTTAAGCTGGTGATCATGCCAGTGATCCAGTGATCCA 2653 2305 TTTCAGATGTTAAGCTGGTGATCATGCCAGTGATCCAGTGATCCA 2653 2306 TTTCAGATGTTAAGCTGGTGATCATGAGCCCAGTGATCCAGTGATCCA 2653 2307 TTTCAGATGTTAAAAAAATTAAAAAATTAGCCAGTGATCCAGAGTACTTGGGAACCAGAGTACTCCAGAGACCA 2653 2422 TCGTTTCTACAAATAATAAAAAATTAGCCAGGTGGTGGTGGTGCACACACA	2661 ACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTG 2954 ACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACTCATTTG 2954 ACTGACCTTTTAGTCATTGACAAGCATTAATCCAGACTCCAGATAACTCATTTG 3014 CTGTATACACATTTTGCCTCTCTTTTCAAATCTTATGCCCTCTTGTGGTGATTTTA 2780 3014 CTGTATACACATTTTGCCTCTCTATTCAAATCATATGCCCTCTTGTGGTGATTTTA 2780 3014 CTGTATACACATTTTGCCTCTCTATTCCAAATTATGCCCTCTTGTGGTGATTTTA 3073 3014 CTGTATACACATTTTGCAATTTTGCAATTCTAGAAAATCTTTTGTCTCAAATTA 3133 4 TGTGCGGAAGGGAACAATAGAAATTTTGCAATTCTAGAAAAATTTTTTTT	3021 TGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCC 3080 3314 TGGTAGAAGGACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCC 3373 3081 ACAGCAGATGTCTTAATCTTTCCGACATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAT 3140 3374 ACAGCAGATGTCTTAATCTTTCCGACATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAT 3433 3141 GTAACTATCTTAATCTTTAAGAGAACAATAGAATCATTGCTGTATAAGAAT 3433 3141 GTAACTATCTTAATGTGAAAAAAAAAAAAAAAAAAAAAA

3600 3660

3720 3660

```
CTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATGAA 3720
CTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGATCTGCTTCGTATATAAA
                                                                                                CTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGT
                                                                                                                                                                      CTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTTTAATGTTCTATCAGTAGTTGT
                                                                                                                                                                                                           ACATCTTACTTGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCA
                                                                                                                                                                                                                                                               CTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAATAAAGTGGCTATAAATGAA
                                                                                                                                                                                                                                                                                                                   /clone="BRACE3024537"
/tissue_type="cerebellum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .4032
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 (bases 1 to 4032)
Isogai, T. and Yamamoto, J.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .4032
                                                                        3421
                                                                                                   3481
                                                                                                                              3481
                                                                                                                                                         3541
                                                                                                                                                                                   3541
                                                                                                                                                                                                             3601
                                                                                                                                                                                                                                        3601
                                                                                                                                                                                                                                                                                           3661
                                                                                                                                                                                                                                                                                                                                                 3721
                                               3421
                                                                                                                                                                                                                                                                   3661
                   3361
                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                         RESULT 2
AK126682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                            g
                                                                                                                                                                                  g
                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                               셤
                                             à
                                                                       g
                                                                                                   ð
                                                                                                                                                         ö
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2940
                                                                                                                                                                                                                                                                                                                                      2700
                                                                                                                                                                                                                                                                                                                                                                                            2760
                                                                                                                                                                                                                                                                                                                                                                                                                      2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3300
                                                                                                                                                                                                                           2580
                                                                                                                                                                                                                                                      2580
                                                                                                                                                                                                                                                                                                           2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3181 GCTGTATAAGTGCTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAAT 3240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3361 TGTAGTCACCTCCTTATGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGTG 3420
                                  2340
                                                              2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTGAACATTTTACATTGTTTATATATTTTTAATCAGTTTTTACTCAAGTGTGATTATATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGTGGTTCACCCATAAGCCACAGCAGATGTCTTAATCTTTCCGAGATCTAGTTTTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3121 CAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATAAAATITAATITITAATITIGAGTAACAATCTGGAATTATCAGAGAAGGGGCAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGCATCAATGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGGATCAATGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGGTTCACCATAAGCCACAGAGGTGTCTTAATCTTTCCGAGATCTATTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTGAACATTTTACATTGTTTATTTTTTAATCAGTTTTACTCAAGTGTGATTATATAC
                                                                                                                                   GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCAATTTTAGGAAAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGTATAAGTGCTTTTTAACCTGTAAATTTTTGTGAAGCTTATCTTTTATGCATATAAAT
                         TTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTGATGCCAGTGA
                                                                                                                                                                                                2461 GGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGTAGTTGTTTGAGACTG
                                                                                                                                                                                                                            GGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAG
                                                                                                                                                                                                                                           TGAGACCCTGTCTCAAAAAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAG
                                                                                                                                                                                                                                                                                                 TGAGACCCTGTCTCAAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAG
                                                                                                                                                                                                                                                                                                                                     2641 ATTAGGGATTTTCAACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCTCTTGTGGTGATTTTAATGTGCGGAAGGAAACAATAGAAATTTTGCAATTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTTAGCCAATTTTAGGAAAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2881 AAAATTTTTTACTTTTCGTCTGCCTTTGTAGCTGTTTTATGATATAAATACCTTATTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAATAGAATCATT
                                                              TCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGCCAG
                                                                                        GGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTG
                                                                                                                                                                                                                                                                                                                                                                                            GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTCTATTCAACGAATTCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTTGCAATTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATTTTTTACTTTTCGTCTGCCTTTGTAGCTGTTTTATGATATAAATACCTTATTTGT
                                                                                                                  ACTGCACAACACAGTGAGACCTCGTTTCTACAAATTAAAAAATTAGCCAGGTGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3301
                                                                                                                                                                                                                                                        2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3241
                                                                                                                    2401
                                                                                                                                                                                                                              2521
                                                                                                                                                                                                                                                                                                                                                                                              2701
                                                                                                                                                                                                                                                                                                                                                                                                                       2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3001
                                                              2341
                                                                                         2341
                                                                                                                                                                        2461
                                                                                                                                                                                                                                                                                                                                                                  2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2821
                                   2281
                                                                                                                                                                                                                                                                                   2581
                                                                                                                                                                                                                                                                                                              2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                a
                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                          ద
                                                                                                                                                                     δ
                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                 ò
                               염
                                                             ò
                                                                                      d
                                                                                                                   à
```

Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-JUL-2003) Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human CDNA Requencing project supported by Ministry of Connomy, Trade and Industry of Japan; CDNA full insert sequencing: Research Association for Biotechnology (RAB); CDNA library construction: Hell:Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5- & 3-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: Reverse Protecomics Research Institute, HRI and RAB. PRI 19-FEB-2004 Ninomiya,K., Wagatsuma,M., Kanda,K., Kondo,H., Yokoi,T.,
Kodaira,H., Furuya,T., Takahashi,M., Kikkawa,E., Omura,Y., Abe,K.,
Kamihara,K., Kateuta,N., Sato,K., Tanikawa,M., Yamazaki,M.,
Sugiyama,T., Irie,R., Otsuki,T., Sato,H., Wakamatsu,A., Ishii,S.,
Yamamoto,J., Isono,Y., Kawai-Hio,Y., Sato,K., Nishikawa,T.,
Kimura,K., Yamashita,H., Marsuo,K., Nakamura,Y., Sekine,M.,
Kikuchi,H., Murakawa,R., Kanehori,K., Takahashi-Fujil,A.,
Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S.,
NBDO human cDNA sequencing project
Unpublished Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Homo sapiens cDNA FLJ44728 fis, clone BRACE3024537.
AK126682
AK12682.1 GI:34533254
Oligo capping; fis (full insert sequence).
Homo sapiens (human)

1201 TITAARGATITATGTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAGTAAACG 1260 		1321 GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTGG 1380 	1381 TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACG 1440   141	1441 AATTICAAAIGCCAACAICICCCCAICCAAITACCIAITICAICITIGAGGIGIAAAICA 1500 	1501 CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT 1560 	1561 TITTCTITTTCTAIGAATATTTTGCATATAAACTTGCAGTAATAGTTCAAAAT 1620 	1621 TAATAGTTTTTGACATTGAGAGAGAGAAATTGAAAGTGTCACAAAATAAAAA 1680 	1681 AAGATGAAATGAAGCATATAAATTGTCAATTTTTCAATTTTCTAGTCAACAGAGAATC 1740 	1741 GAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATTAAACTTGTGCTTATATTTTGTTT 1800 	1801 GCAACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGT 1860 	1861 TICTGGTTTTAAAATTCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTCTTT	1921 AAGAAGTITITTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGACAA 1980 	1981 TGCATTCATTATATTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAGATG 2040 	2041 AGATGCTTGGGACCAGAAGTGTTTTGGATTTATTTTTTGGATTTTTGGAATATTT 2100 	2101 CCATACATATAATGAGAGATTGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTA 2160 	2161 TGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAA 2220	2221 TTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTAT 2280
ò da	δ d	රු සි	ço da	& 8	\$ A	oy Pp	& 8	ð 8	6 G	oy Oy	දි සි	oy du	λο qα	& A	රු පු	ठं व ठं	ପ୍ର
	0 0 0		0 0	0 0		0 0			0 0					0 0	0 0	0 0 0	
61         GGAGAGAATCAAAAGGAAAGGAAACCCAGATGAGGAAAGAAA	AUGACIACATTIGAAAGAAAACTTCAAGATCAAGATAAGAAAAAGCCAAGAAGTTTCATCC 18 ACTTCTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAAGTGTGCTACACTGTCATT 24 ACTTCTAATCAGGAAAACGAAAGCAGAGTGGTTCTGAAGAAGAAGTGTGCTACACTGTATT 34 ACTTCTAATCAGGAAAAACGAAGAAGGCATGGTTCTGAAAAAAAA	AATCACATCCCCCATCACAGATCCTCCCTGAGCTCCAATGATGAGCTATGAGAACATT AATCACATCCCCCATCACAGATCCTCCTGAGCTCCAATGATGATGAGAACATT	3CCCTT 	STTGTG	SCAGAA         SCAGAA	81 TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA 540	ATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG	GGGAAATCATAGAAATTGACAAATGACCTAAAATATTCTATGTTTTTGC					901 GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGAT 960 			GACCT        GACCT TTCCA	

9 9 9

è a

8 %

6 PB PS

원 상 원

8 3

QQ Dp

DNA sapi

```
/translation="MGNYLLRKLSCLGENQKKPKKGNPDEERKRQEMTTFERKLQDQD
KKQGEVSSTSNQENGSGSBEBVCYTVINHTPHQRSSLSSNDDGYENIDSLTRKVRQF
RERSETEYALLRTSVSRPCSCTHEHDYEVVPPH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel genes associated with allergic hypersensitivity and mast cell activation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                        Sequence
Human DNA
                                                                                                                                                                                                                                                                                                                                                      Sequence
Human DNA
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapi
Homo sapi
                                                                                        Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                        Seguence
Seguence
Seguence
                        Sequence
                                                                                                                                                                                                                                  Homo sapi
                                                                    Sequence
                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
Homo
Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                   C0469395 S
C049863 S
C049863 S
C0488397 S
C0568397 S
C0568397 S
C046806 S
C0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC018681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6; Length 3762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25. .. 432
/note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 3762;
100.0%; Pred. No. 0;
cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nocka, K., Pirozzi, G. and Einstein, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 0246389-A 1 13-JUN-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |codon start=1
|protein id="CAD48808.1"
|db_xref="GI:23386430"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX505122 3762 bp
Sequence 1 from Patent W00246389.
AX505122 4X505122.1 GI:23386429
                                                                                                                                                                                      CQ469060
AC002390
AC024682
                                                                                                                                                                                                                                                        CQ477717
CQ468549
CQ498920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AC034298
AC093560
AC090796
                                                                                           CQ499760
CQ508397
CQ508729
CQ478228
                                                                                                                                                                                                                                                                                                                                                                                                                           AC016043
AL391811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AC091561
AC018681
                                                                                                                                                                                                                                                                                                                                                                              AL355344
AC007484
                                                                       CQ499427
                                                                                                                                                                                                                                                                                                                               CQ507889
                                                                                                                                                                                                                                                                                                                                                           CQ508110
                           20469395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                  421
437
437
437
404
70311
174875
                                                                                                                                                                                                                                                                                                                                                                              149490
168312
                                                                                                                                                                                                                                                                                                                                                                                                                           191161
150424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            191037
                                                                                                                                                                                                                                                           359
                                                                                                                                                                                                                                                                                                                                                        401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            190793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98697
                                                                                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best_Local Similarity
Matches 3762; Conserv
UCB, S.A.
93994.8

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

93992.2

939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
AX505122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapi
Macaca fa
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Homo sapi
Human DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapi
Homo sapi
Sequence
                                                                                                                                                                  November 18, 2004, 12:52:13 ; Search time 15375 Seconds (without alignments) 11570.982 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX505122 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AK126682 F
CQ841482 S
AK124520 F
AL606804 F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AC074365 H
BC024174 H
CQ842314 S
AK123798 H
AB060908 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CQ488563 CQ488741 CQ488930 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CQ494252 (CQ494397 (CQ494775 (CQ49475 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CQ488422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9053458
                             GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                        sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX505122

AK126682

AK1246820

AK124520

AK124520

AL606804

AL606804

AL606804

AL606804

AC0241314

AC123798

AB060908

AB060908

AC048422

CQ48842

CQ48842

CQ48842

CQ48842

CQ48842

CQ48842

CQ48842

CQ48830

CQ48425

CQ49435

CQ49435

AC023386
                                                                                                                                                                                                                                                                                                                                                                                                                                  4526729 seqs, 23644849745
                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                        using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВВ
                                                                                                                                                                                                                                                             US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.6 4032
95.4 4136
95.4 4136
93.6 185467
93.3 141268
64.5 1709
44.5 1709
40.0 1924
28.4 1128
28.4 1128
28.4 1128
28.4 1128
28.4 1128
28.4 1128
28.4 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9b ba: *
9b htg: *
9b in: *
9b on: *
9b ov: *
9b ph: *
9b pr: *
9b r: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gb_sy:*
gb_un:*
gb_vi:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length
                                                                                                                        nucleic search,
                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenEmb1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3590
3522.2
3511.6
2604.8
1673.4
1573.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068
1068
1068
1068
1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1068
                                                                                                                                                                                                                                                                                   Perfect score:
                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                        OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                         on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š.
```

ö

υ

inis Page Blank (uspto)

```
10404 GAAGGTTGCAGTGAGCCAAGATTACGCCATTGCACTCCAGCCTGGGCAACAGAGCAAGAC 10463
                                           10224 CACTITIGGGAGGCCAAGGCAGGTGGATCACTTGAGGTCAGGAGTTTGAGACCCGCCTGGC 10283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10404 GGAGGTIGCAGIGAGCCAAGATTACGCCATTGCACTCCAGCCTGGGCAACAGAGCAAGAC 10463
  2347 TACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCA 2406
                                                                                                                    10344 TGCCTGTAGTTCCAGCTACTCGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGT
                                                                                           CAACACAGTGAGACCTCGTTTCTACAATAATTAAAAATTAGCCAGGTGTGGTGGTGCA
                                                                                                                                                                                2467 CACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGGAGGT
                                                                                                                                                                                                                                                                     2527 TGAGGCTGAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2287 TCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGCATCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10164 TCCTTGATTAAAAGTCAGATTCTGAGGCTGAGTGTGTGTCTCTCACACCTGTAATCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10224 CACTITGGGAGGCCAAGGCAGGTGGATCACTIGAGGTCAGGAGTTTGAGACCCGCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2347 TACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAAGACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10344 TGCCTGTAGTTCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2527 TGAGGCTGAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAACACAGTGAGACCTCGTTTCTACAAATAAATAAAAAATTAGCCAGGTGTGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2467 CACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.3%; Score 200.4; DB 14; Length 17239; 74.6%; Pred. No. 1e-28; ative 0; Mismatches 86; Indels 0; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATE: Rosen et al.
TITLE OF INVEXTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PCOO.TO.
CURRENT APPLICATION NUMBER: US/10/091,504
CURRENT FILING DATE: 2002-03-07
NUMBER OF SEQ ID NOS: 2442
Prior Application removed - See File Wrapper or Palm
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                   10464 TCCGTCTCAAAAAAAAAAAAAAAAGTCAGATTCTGGAG 10501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10464 TCCGTCTCAAAAAAAAAAAAAAAGCTCAGATTCTGGAG 10501
                                                                                                                                                                                                                                                                                                                                                            2587 CCTGTCTCAAAAAAAAAAAAAAAGTTTCAGATTTTGGAG 2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2587 CCTGTCTCAAAAAAAAAAAAGTTTCAGATTTTGGAG 2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search completed: November 19, 2004, 01:44:09
Job time : 1747 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 2326, Application US/10091504; Publication No. US20030059908A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 74.6'
Matches 252; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
US-10-091-504-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-091-504-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 2326
                                                                                           2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGIH:
                                      Q
                                                                                                                             g
                                                                                                                                                                                                                qq
                                                                                         ò
                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10164 ictricatramamagicagarrergaggergachgregrererchenedrateerd 10223
                                                                                                                                                                                                                                                                                         1013
                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                         CITGGITICCACAACC-CCTITATITIAGCTAAAGCATICTITICTACTGACTICTIAAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1313 CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATTT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTITICCATTIAATGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTAAACGGTGACCTGACCACCTCAGGCACATTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2346
                                                                                                                                                                                                                                                                                                                            935 Triàcrecerarrerererassecrearecerereaacererererereraraseaseae 876
                                                                                                                                                                                                                                                                                                                                                                                                                   699 ACCTICCATGIATIGACTIATGATTTTACCTAAATTCCTGTCTCCCTAAAATGTACAAA 640
                                                                                                                                                                                                                                                                                  954 TGTAGATCACACACTGTGTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2287 TCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                  DB 13; Length 130207;
                                                                                                                                                                                                                                              16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 5.3%; Score 200.4; DB 9; Length 17239; Best Local Similarity 74.6%; Pred. No. 1e-28; Matches 252; Conservative 0; Mismatches 86; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2325, Application US/09764869
Patent No. US20020061521A1
Patent No. US20020061521A1
APPLICANT: ROSen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PCO07
CURRENT APPLICATION WUMBER: US/09/764,869
CURRENT FILING DATE: 2001-01-17
Prior application data removed - refer to PALM or file wrapper NUMBER OF SEQ ID NOS: 2442
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                         Query Match 5.3%; Score 201.2; DB 13; Length Best Local Similarity 72.2%; Pred. No. 1.7e-28; Matches 322; Conservative 0; Mismatches 108; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1362 TACAGAATTTGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519 TACAGAGCAGTAATTTGGGAGGCTAA 494
                                                         FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)...(130207)

OTHER INFORMATION: n = A,T,C or G
                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo sapiens US-09-764-869-2326
LENGTH: 130207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
US-09-764-869-2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q ID NO 2326
LENGTH: 17239
                                                                                                                                                                                                                                                                                                                                                                       1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        639
                                                                                                                                                                                                                                                                                                                                                                                                                   875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

o,

```
i LOCATION: (1)...(95960)
; OTHER INFORMATION: n = A,T,C or
US-10-087-192-1390
                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 72.2'
Matches 322; Conservative
                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                     NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-087-192-1372/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           954 TGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGAC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4743 TTTACTGCCTATTCTCTCTGAAGGCTGATGCCTGTGAAACTTTGTCTTCATAACAAGAAC 4802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1253 AGTAAACGGTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATTT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4979 ACCTTCCATGTATTGACTTATGATTTTACCTAAAATTCCTGTCTCCCTAAAATGTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5039 ACCAATGTATACCCTGACCGCCTTGGCCACACTTTCTCAGGATCTCTTGAGACTGTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1014 CTTGGTTTCCACAACC-CCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4861 TCTTTAGACACAGATGAACTCTTTTAACCAATTGCCAATCAGAAAATCTTAGACTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1193 ACTITICCALTIAATGATITATGICITIGCTIGIAACTCCTGTCTCCCTAAAATGIATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5099 CAGGCCATGGTCACTCATATGGCACGCATATGGGCTCAGAATAAACCTCTTTAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 13; Length 95960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
Fublication No. US20020182586A1
GENERAL INFORMATION:
APPLICANT: Morris, David W.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: CANCER
TITLE OF INVENTION: MOUBLE COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: MOUBLE: US/10/087,192
CURRENT PEPLICATION NUMBER: US/377
PRIOR PEPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-22
NUMBER OF SEQ ID NOS: 2059
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: CANCER
FILE REPRENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.3%; Score 201.2; DB 13;
llarity 72.2%; Pred. No. 1.5e-28;
Conservative 0; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACAGAATTTGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5159 TACAGAGCAGTAATTTGGGAGGCTAA 5184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 1390, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature

| DCCATION: (1)...(95960)

| OTHER INFORMATION: n = A,T,C or G

US-10-087-192-1384
                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 322; Conserv.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
US-10-087-192-1390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \overset{\circ}{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
1253 AGTAAACGGTGACCTGACCACCTCAGGCACTTTCTCAGGACCTCCTGAGAGTGTATCC 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1014 CTTGGTTTCCACAACC-CCTTTATTTTAGCTAAAGCATTCTTTTCTACTGACTTCTTAAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4861 retringadadadagtigaactertrinaacdaaridecaardagaaarternagactecadd 4920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGC 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4921 TAAGACCTGTAA--CCACCCCCTCCAAGGTATCTTGCTTCTTTAGGCTGAATCAATGTAT 4978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTITICCATITAATGATITAATGFCTITGCTTGTAACTCCTGTCTCCCTAAAATGTATAAA 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4979 ACCTICCATGTATGACTTATGATTTTACCTAAAATTCCTGTCTCCCTAAAATGTACAAA 5038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1313 CAGGCCATGGTAAGT-----CATGTTGGCTCAGAATCAACCTCTTTAAATATTT 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              954 IGTAGAICACACACTGTCTGAGGGATTCCATCTAIGAGACTTTGTCTACATAACAGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACTGCCTATTCTCTCTGAAGGCTGATGCCTGTGAAACTTTGTCTTCATAACAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 13; Length 95960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: CANCER.
FILE REPERRICE: 529452000122.
CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT FILING DATE: 2002-03-01.
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22.
PRIOR PILING DATE: 2001-03-02.
NUMBER OF SEQ ID NOS: 2009
SOFTWARE: FRESESE FOR THE STATE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.3%; Score 201.2; DB : 72.2%; Pred. No. 1.5e-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1362 TACAGAATTTGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5159 racadagenaririedeageeraa 5184
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR FILING DATE: 2000-12-22
PRIOR PILING DATE: 2000-12-22
PRIOR FILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 2059
SOFTHARE: PastSEQ for Windows Version 4.0
LENGTH: 95960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1372, Application US/10087192; Publication No. US20020182586A1; GENERAL INFORMATION:
```

```
2101
                                                                                                                                                                                                                                                                                                                                                                                                        2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2548
                                                                                                                                                                                                                                                                                                                                                                             140779
                                                                                                                                                                                                                                                                                                                                                                                                                                  140722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140602
                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136074 GTTTGCTGTCATGTCAGTGCTCAAAACATTTTGGATTTTTAGGGCATTTCAGATTTTGGAT 136015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACACCÁCTGCACTCCAGCCTGGGCAACAGAGTGAGACTCCGTCTCCATTAAAAAAA 135655
                                                                                                                                                                                                                     reacrecerracaaarcaarreageracrerarracagarreagraarcerrarea 136311
                                                                                                                                                                                                                                                                                                                                CCATACATATA---AGATATGTTGGAGATGGGACCCAAGTATAAACATAAAATTCATTTA 136195
                                                                                                                                                                                                                                                                                                                                                                                        TGTTTCAAAAATACCTTATACACACGCCTGAAGGCAATTTTATACAACATTTTTAAATAA 136135
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITITGITICAGAAAGGAAGITIGIATACATIGAACACAIAAAGICACAIAAITITCIAC 136075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135954 TTCTTGGCTGGCATGGTAGCTTATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCCA 135895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          135775
                                                                                                                                                                                                                                                                           136310 AACTGCCTGGGACCAGAAGIGTTTCAGATTTCAGATTT-TTTTCAAATTTTTGGGATATTT 136252
                                                                                                                                                                                             1981 IGCATICATIAIAINITITITIGIAIAGTIACAGIAIACGAGIIGAGIAICCCTIAGAIG 2040
                                                                                                                                                                                                                                                                                                                                                                                                                  TITITATGCCTGAAACAGAGTITGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTA- 2279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cracraaaaaracaaarragccaggcarggrggragcaccrgraarcccagcgacrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGAGGCTGAGGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGA
                                                                                                                                                                                                                                                  CCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTA
                                                                                                                                                                                                                                                                                                                                                             TGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136014 TAGGGATGCTCAACCTGTATTTTATGGTAATAAACCGCATTTCTTTAAAAATATTGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCTACCACCTGTAGTCCCAGGTACTC
                                                                                                                                                                      Gaps
                                                                                                                                            Length 301692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----TITCAAGICAGIGCICAAAAAGITITCAGAIGIIAAGCI----
                                                                                                                                         Score 203.8; DB 16; Length
Pred. No. 7.8e-29;
0; Mismatches 177; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-367-094-195/c

Sequence 195, Application US/10367094

Publication No. US20040170982A1

; GENERAL INFORMATION:

APPLICANT: David W. Morris
PRIOR APPLICATION NUMBER: 60/191,201
PRIOR FILING DATE: 2000-03-22
NUMBER OF SEQ ID NOS: 84
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 11
LENGTH: 301692
                                                                                                                                         5.4%;
ilarity 62.0%;
Conservative
                                                                                   ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-428-487-11
                                                                                                                                         Query Match
Best Local Similarity
Matches 447; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     135654 A 135654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2548
                                                                                                                                                                                                                      136370
                                                                                                                                                                                                                                                                                                        2101
                                                                                                                                                                                                                                                                                                                                  136251
                                                                                                                                                                                                                                                                                                                                                               2161
                                                                                                                                                                                                                                                                                                                                                                                        136194
                                                                                                                                                                                                                                                                                                                                                                                                                    2221
                                                                                                                                                                                                                                                                                                                                                                                                                                            136134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2608
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Бb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
140780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GrrrGCrigicardricadidericada acartrir ga arritra a ga carrrea arritrada a 140543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTTGTTTCAGAAAGGAAGTTTGTATACATTGAACACATAAAGTCACATAATTTTCTAC 140603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1981 TGCATTCATTATATATTTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140542 TAGGGATGCTCAACCTGTATTTTATGGTAATAAACCGCATTTCTTTAAAAATTGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  140898 IGACTGCCTTACAAATCAATTTGAGCTACTGTATTTACAGATTGAGTAATCCTTATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140838 AACTGCCTGGGACCAGAAGTGTTTCAGATTT-TTTTCAAATTTTGGGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATACATATA---AGATATGTTGGAGATGGGACCCCAAGTATAAACATAAAATTCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rgrircaaaaaraccriraracacacccrcaaccaarrirraracaacarriraaaraa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140482 TTCTTGGCTGGCCATGGTAGCTTATGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140422 GridGAricacirigaGGTCAGGAArircGAGACCAGCCriGACCAACArGGTGAAACCriCGricri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140362 CTACTAAAAATACAAAAATTAGCCAGGCATGGTGGTTGGCACCTGTAATCCCAGCGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140302 GGGAGGCTAAGGCAGGAGAATCGCTTGAACCTGGGAGGCAGAGGTTGCAGTGAGCCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATACATATAATGAGAGATTGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2488 AGGAGGTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITIAIGCCIGAAACAGAGIITIGCGCACAIIGGACCAICAGAAAGCAGAAGIGICACIA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACAAATAATTAAAAAATTAGCCAGGTGTGGTGGTGCACCCTGTAGTCCCAGGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 17; Length 310268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----TITCAAGICAGIGCICAAAAAGIIITCAGAIGIIAAGCI---
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 5.4%; Score 203.8; DB 17; Best Local Similarity 62.0%; Pred. No. 7.9e-29; Matches 447; Conservative 0; Mismatches 177;
APPLICANT: Marc Malandro;
TITLE OF INVENTION: Novel Therapeutic Targets in
FILE REFRENCE: 529452001500;
CURRENT APPLICATION NUMBER: US/10/367,094;
CURRENT FILING DATE: 2003-02-14;
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 195
: LENGTH: 310268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
US-10-087-192-1384
; Sequence 1384, Application US/10087192
                                                                                                                                                                                                                                                                                                                         TYPE: DNA
CORGANISM: Homo sapiens
US-10-367-094-195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140182 A 140182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2608 A 2608
```

```
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         967 CIGICIGAGGGAITCCAICIAIGAGACITIGICIACAIAACAGAGACCITGGITITCCACA 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1027 ACCCCTTTATTTAGCTAAA-GCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAG 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTAACTCTTTCAACCAATTGCCAATCAGACATTTGAATCTACCTATGACCTGTAAG 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1146 CICICICCIGCITCAAGAICTIGCCICITIAAGCIGAACCGAIGIGCACTITCCAITIAA 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAA 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601 GGCCCCCACTTTGAGATGTCCTGTCTTCAGGCTGAACCAATGTATATCTTACATGTAT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 IGATITATGICITITGCTTATAACCTCTATCCCCTAAAATGTATAAAACCATACTCTAAC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660 chraachthreaccaardacaacaaaaaahrchhreanteachch-ceacchecaa 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccaacraccrcasscarcrrrcrcassacrrcrrsasacricrrccrcssccarssrca 422
Sequence 31701, Application US/10027632
| Publication No. US20020198371A1 |
| GENERAL INFORMATION: |
| APPLICAMY: Wang, David G. |
| TITLE OF INVENTION: | Identification and Mapping of Single Nucleotide |
| TITLE OF INVENTION: | Polymorphisms in the Human Genome |
| TITLE OF INVENTION: | Polymorphisms in the Human Genome |
| TITLE OF INVENTION: | Polymorphisms in the Human Genome |
| TITLE OF INVENTION: | 108827.129 |
| CURRENT APPLICATION NUMBER: US/10/027,632 |
| CURRENT APPLICATION NUMBER: US/01/28,676 |
| PRIOR PILING DATE: 2000-04-20 |
| PRIOR FILING DATE: 2000-04-20 |
| PRIOR FILING DATE: 2000-03-29 |
| PRIOR FILING DATE: 2000-03-29 |
| PRIOR FILING DATE: 1999-11-23 |
| PRIOR FILING DATE: 1999-09-28 |
| PRIOR FILING DATE: 1999-09-28 |
| PRIOR FILING DATE: 1999-09-09-8 |
| PRIOR FILING DATE: 1999-08-09-8 |
| PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 718 TCTCCCTTATCTTAAATAAACCCTTTCTTTCTACTGACTTC--AAGTCTTATACAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        778 crcirgaaggrigcaaccrggaggcrccrrracaaraacaagaarcrgggcrrcccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAAGTAAAACGGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1326 GTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTT 1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCATATTGGCTCTGAATAAACCTCTTTAGATATTTTACAGAGTTTACTTT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 5.4%; Score 205; DB 13; Length 8 Best Local Similarity 73.5%; Pred. No. 3.4e-30; Matches 302; Conservative 0; Mismatches 105; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 31701, Application US/10027632
; Publication No. US/2030204075A9
; GENERAL INFORMATION:
; APPLICANT: Wang, David G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
US-10-027-632-31701/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-31701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
1086 CITAACICITICAACCAATIGCCAATCAGACAACTITGAATCTACCTATGACCTGTAAG 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1146 CTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAA 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAA 1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  967 CTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTTTCCACA 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601 GGCCCCCACTTTGAGATGTCCTGTCTTTCAGGCTGAACCAATGTATATCTTACATGTAT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541 IGAITIAIGICITIGCITIATAACCICIAIGICCCIAAAAIGIAIAAAACCAIACICIAAAC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACTACCTCAGGCACACTTTCTCAGGACTTCTTGAGACTGTTCCCTGGGCCATGGTCA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  718 TCTCCCTTATCTTAAATAAACCCTTTCTTTTCTACTGACTTC--AGTCTTTTATACAAAG 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1027 ACCCCTTTATTTTAGCTAAA-GCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cretrosaasserrocaacersoassecrecertracaaraaaasaarerssecreese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11. Application US/10428487
Publication No. US2004006780A1
GENERAL INFORMATION:
APPLICANT: RASTELL, LUCA K.
APPLICANT: GERBER, HANS-PETER
TITLE OF INVENTION: VEGF-MODULATED GENES AND METHODS EMPLOYING THEM
FILE REFERENCE: 09800086-0103
CURRENT FALICATION NUMBER: US/10/428,487
CURRENT FILING DATE: 2003-05-02
PRIOR APPLICATION NUMBER: 09/815,153
PRIOR FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1326 GTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGGTT 1376
           INVENTION: Identification and Mapping of Single Nucleotide INVENTION: Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCATATTGGCTCTGAATAAACCTCTTTAGATATTTTACAGAGTTTACTTT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 205; DB 15;
Pred. No. 3.4e-30;
0; Mismatches 105;
TITLE OF INVENTION: Identification and Mappin TITLE OF INVENTION: Polymorphisms in the Hun FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR FILING DATE: 2000-04-20
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-02-24
PRIOR FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,363
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-11-23
PRIOR PAPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR SPULING DATE: 1999-09-28
PRIOR FILING DATE: 1999-08-09
PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.4%;
ilarity 73.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 302; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-027-632-31701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-428-487-11/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastS:
SEQ ID NO 31701
LENGTH: 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
```

```
TCAGAATAAACCTCTTTAAGTATTTTACAGAGTTTGTTTTCTTCTGTTAACAAAGAGAGTG 50838
                                      17595 CTTCTATCTCCTAAAATGTATAAAACCAGGCTGAAACCTGACCACCTCGGGCCCACGTT 17536
                                                                                                                                CTCAGGACCTCTTGATATTGTTCCCCAGGTCAATATGGTCACTCATATTGGCTCACAATA 17476
CICCIGICICCCIAAAAIGIAIAAAAGIAAAACGGIGACCIGACCACCICAGGCACACIII 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITIGCTIGIAACTCCTGTCTCCCTAAAATGTATAAAAGTAAAACGGTGACCTGACCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGCTTGTAACTCCTGTCTCTCTGAAATGTGTAAAACCAAACAGTAACTGGACCACCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1077 CAAGATATCCCACCTGTTTAGGCTGAACCAAGGTATACCTTCTGTGTATTGAGTTATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGCGAGCTTTCTCAGGACCTCATGAGACTGTTCCCTGGCCCATGGTCACTTACACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1337 TCAGAATCAACCTCTTTAAATATTTTTACAGAATTTGGGTTTTGGTTACCAATAAGTCTCC
                                                                                         CTCAGGACCTCCTGAGAGTGTATCCCAGGCC---ATGGTAAGTCATGTTGGCTCAGAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51252 GAGGCTTCATCTACATAACAAGAACCTTGGCCTCCACAA---CTGTCCTTTGTCTTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1049 ATTCTTTCTACTGACTTCTTAAAGTCTTTAGACAAAGCTTAAACTCTTTCAACCAATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51195 ATTTCTTTCTACTGACTTC--AAGTCTTTAGGCAAAACTTAAACTCTTTCAATCAACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51137 AATAAAATATCTTTGAATCTACCTAAGACCTGTAAGCACCCCCACCCTCCAAGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1277 AGGCACACTITICICAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATCAGACAAACTTTGAATCTACCTATGACCTGTAAGCTCTCTCCTGCTTCAAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----ATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.5%; Score 207.4; DB 13; Length 63313; Best Local Similarity 72.7%; Pred. No. 7.7e-30; Matches 315; Conservative 0; Mismatches 101; Indels 17;
                                                                                                                                                                                                         AACCICITIAAAIATITIACAGAATITIGGGTTTTGGTTACCAA 1387
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Morris, David W.
APPLICANT: Engelhard, Eric K.
TITLE OF INVENTION: CANCER
FILE REFERENCE: 529452000122
CURRENT APPLICATION NUMBER: US/10/087,192
CURRENT PLILE DATE: 2002-03-01
PRIOR APPLICATION NUMBER: US 09/747,377
PRIOR RILING DATE: 2000-12-22
PRIOR RILING DATE: 2000-12-22
PRIOR FILING DATE: 2001-03-02
PRIOR FILING DATE: 2001-03-02
NUMBER: OF SEQ ID NOS: 2059
SOFTWARE: FRASESQ for Windows Version 4.0
SEQ ID NO 526
                                                                                                                                                                                                                                                                                                                         Sequence 526, Application US/10087192
Publication No. US20020182586A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50837 TGATAATTATTÜ 50825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1397 ACANATATATGTC 1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                            US-10-087-192-526/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-087-192-526
  1228
                                                                                         1288
                                                                                                                                                                              1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51017
                                                                                                                                  17535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                g
                                                                                       ð
                                                                                                                           g
                                                                                                                                                                           ò
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17655 GCCTTTCTGGGCTGAACCAAAGTAAACCATCCATATATTGATTCATGTCTTTGCCTGTAA 17596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                989 GAGACTTTGTCTACATAACAGAGACCTTGGTTTCCACAA-CCCCTTTATTTTAGCTAAAG 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAATCAGACAAACTTTGAATCTACCTATGACCTGTAAGCTCTCTCCTGCTTCAAGATCTT 1167
                                                                                                                                                                                                  2385
                                                                                                                                                                                                                                                                                       GGAGTITGAGGCCAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA 2445
                                                                                                                                                                                                                                                                                                                                                                         TTAGCCAGGTGTGGTGCTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAG 2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCA 2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCAATTGC 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGTITIGAGACCAGCCTGGGCAACATGGCAAAAACCCTCTCTCTACAAAAAT--ACAAG 468
                                                                                                                                                                                                                                                                                                                                                                                                                     TTTGCCAGGTGTGGTAGCAWGTGCCTGTAGTCTCAGGTCTTCAGGCGGCGGCTGGGGTGGAGA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATTGCTTGAGCCCAGAAAGTGGAGGCTGCAGTGAGCCGAGATGGCAGCACCACTCCTCCG 348
                                                                                                                                                    637 CAAAGGTGTCAC-----GCTGGTATTGAAAAAGTTTCAGATTCTAGCCAGCCACGT 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTAAGCTTTGCTTGTAA
                                                                                                                                                                                              2326 AGTICATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCA
                                                                                                                                                                                                                                           GGCTCAAGCCAGTAATCCCAGCACTGTAGGAGGCTGAGGCAGGAGGATCCCTTGAGCCCA
                                                                                                           CAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAAGCTGGTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 58320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-10-322-281-88/C
10-322-281-88/C
Sequence 88, Application US/10322281
Publication No. US20040126762A1
FORBERAL INFORMATION:
APPLICANT: David W. Morris
APPLICANT: Marc S. Malandro
FILLE REFERENCE: 529452001000
CURRENT APPLICATION NUMBER: US/10/322,281
CURRENT FILING DATE: 2002-12-17
NUMBER OF SEQ ID NOS: 866
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 5.5%; Score 207.4; DB 17; Length Best Local Similarity 76.4%; Pred. No. 7.4e-30; Matches 308; Conservative 0; Mismatches 86; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATTICAGAICTICAGATTAGGGATTITCAACCTGTACT 2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-322-281-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 88
                                                                                                                                                                                                                                                                                                                                                                                                                     467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          407
                                                                                                           2266
                                                                                                                                                                                                                                                                                     2386
                                                                                                                                                                                                                                                                                                                                                                         2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1168
                                                                                                                                                                                                                                           585
                                                                                                                                                                                                                                                                                                                              525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                         ઠ
                                                                                                                                                                                         ⋩
```

```
2385
CAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGC 2325
                                                                                                                                                                                                                                                                GGAGTTTGAGGCCAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA 2445
                                                                                                                                                                                                                                                                                                                                                                                                2446 TTAGCCAGGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAG 2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCA 2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2086 GATTTTGGAATATTTCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGTCTAAT 2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2146 CATAAAATTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATA 2205
                                                                                                                                                                                                                                                                                                          GATTGCTTGAGCCCAGAAAGTGGAGGCTGCAGTGAGCCGAGATGGCAGCACTGCTCTCCG 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAAGGIGICAC-----GCIGGIAIIGAAAAGIIICAGAIICIAGCCAGGCACCGI 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                               467 TTTGCCAGGTGTGGTAGCAWGTGCCTGTAGTCTCAGGTCTTCAGGCGGGCTGGGGAG 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               812 GATTTTGGAATGTTCTCGCATACATAGTAGATGTTTGGGGATGTGACATAGGGTCTAAA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 125465/C
Sequence 125465, Application US/10027632
Publication No. US20030204075A9
Fublication No. US20030204075A9
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
FRIOR FILING DATE: 2002-04-30
FRIOR APPLICATION NUMBER: US 60/199,676
FRIOR FILING DATE: 2000-04-20
FRIOR FILING DATE: 2000-03-29
FRIOR FILING DATE: 2000-03-29
FRIOR FILING DATE: 1999-11-23
FRIOR FILING DATE: 1999-11-23
FRIOR FILING DATE: 1999-11-23
FRIOR FILING DATE: 1999-09-28
FRIOR FILING DATE: 1999-09-28
FRIOR FILING DATE: 1999-09-28
FRIOR APPLICATION NUMBER: US 60/146,002
FRIOR FILING DATE: 1999-09-28
FRIOR FILING DATE: 1998-09-28
FRIOR FILING DATE: 1998-09-28
FRIOR FILING DATE: 1998-09-30-30
FRIOR 
                                                                                                                                2326 AGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCA
                                                                                                                                                                                           GGCTCAAGCCAGTAATCCCAGCACTGTAGGAGGCTGAGGCAGGAGGATCCCTTGAGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATTICAGAICTICAGAITAGGGAITTICAACCIGIACT 2663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cerricadarrirregarradegiecidaaccidraar 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.0%; Score 224.6; DB 15;
68.9%; Pred. No. 4.9e-34;
tive 0; Mismatches 164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-027-632-125465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 399;
                                                                                                                                                                                                                                                                2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2506
2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                             g
                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                         음
                                                                                                                  충
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                           187575 TTTCAAAATAGAGTGCATTACTGGTAAAAAAACAAGTTGAAGGCTGGATACGGTGGCTC 187516
                                                                                                                                                            187456
                                                                                                                                                                                                                                                                       187395 CAGGCAIGGIGGIGGGIGCGIGCTAATICCTAAGCTACTCAAGAAGTIGAGGCAGGAGGAICA 187336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187335 CTTGAACCCAGGAGACGGAGGTTGCAGTGACGGACACAGTGCCACTGCACTCCAGCCTG 187276
                                                                                                                                                                                                                          TTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGC 2450
                                                                                                                                                                                                                                                                                                                                                              CAGGIGIGGIGCACACCIGIAGICCCAGGIACTCAGGAGGCIGAGGIAGIAGAGGAITG 2510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2511 TITGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACCACTTCCAGCTTG 2570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2086 GATTITGGAATATTTCCATACATATAATGAGAGTTGGAAAAATGGGATTCAAGTCTAAT 2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2146 CATAAAATTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATA 2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2206 CAATATITIAAATAATTITATGCCIGAAACAGAGTITGCGCACATIGGACCATCAGAAAG 2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     812 GATTTTGGAATGTTCTCGCATACATAGTAAGATGTTTGGGGATGTGACATAGGGTCTAAA 753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INCRMANION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
FILE SPENENCE: 108827.129

CURRENT APPLICATION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US 60/218,006

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 2000-03-29

PRIOR FILING DATE: 1999-11-23

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-08-28

PRIOR PRIOR FILING DATE: 1999-08-28

PRIOR FILING DATE: 1999-08-28

PRIOR APPLICATION NUMBER: US 60/146,002

SOFTWARE: FASELSEQ FOR WINDOWS VERSION 4.0

SECTION OF 125465

LENGTH: 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         752 CAAGAAGCTCA - TITGITICATATACACCTTATTCACATAGCCTGAAAGTAGTCTTACG
                                                                                             ATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGT
                                                                                                                                                        187515 Ardccreranicccadractrigesaggccsaggcaggragarreccreaggraggra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 224.6; DB 13; Length
Pred. No. 4.9e-34;
0; Mismatches 164; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187275 GGCGACAGAGTCACTCTGTCAAAAAAAAAAAAAAA 187238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-027-632-125465/c
; Sequence 125465, Application US/10027632
; Publication No. US20020198371A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 399; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-027-632-125465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Human
                                                                                             2331
                                                                                                                                                                                                                             2391
                                                                                                                                                                                                                                                                                                                                                              2451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gg
                                                                                                                                                                                                                      \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

3361 TGTAGTCACCTCCTTATGAAGAGACAGAACATCCTCCCAGAAAGTTCCACAGTG  3361 TGTAGTCACCTCCTTATGAAGAGACAGAACATCGTCCCCAGAAAGTTCCACAGTG  3361 TGTAGTCACCTCCTTATGAAGACAGAACACGTACATCCTCCCCAGAAAGTTCCACAGTG  3421 CTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCATGATCTGCTTCGTATAATTATAA  3421 CTCCTTTTCCTGAGTTTCACCAGTCCTGGCAACCATGATCTGCTTCGTATAATTATAAA  3481 CTGTTCTAGATATTGTAGCAATGTACCCTTTCCATATTTATT	Oy         3601 ACATCTTACTTGTCTCAGCATATCACCATATACTATACT	RESULT 2 US-10-322-281-800/c    Sequence 800, Application US/10322281   Sequence 800, Application US/1032281   Publication No. US20040126762A1   GENERAL INFORMATION:   APPLICANT: David W. Morris   APPLICANT: Marc S. Malandro   TITLE OF INVENTION: Novel Compositions and Methods in Cancer   CURRENT APPLICATION NUMBER: US/10/322,281   CURRENT PILING DATE: 2002-12-17	<pre> ; NUMBER OF SEQ ID NOS: 866 ; SOFTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 800 ; LENGTH: 191584 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-322-281-800 Guery Match</pre>		
2281 TTCAAGTCACTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGA 2340 2281 TTCAAGTCCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGA 2340 2281 TCCAAGTCCTCAAAAAAATTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGA 2340 2341 TCCGAGTACTTTGGGAAGCCAAGACAGTGATCTCTTGAGCCAGGAGTTTTGAGGCCAG 2400 2341 TCCGAGTACTTTGGGAAGCCAAGACAGTGATTCTTTGAGCCAGGAGTTTTGAGGCCAG 2400 2401 ACTGCACAACACAGTGAAGCCAGGTGTTCTTCTACAATTAAAAAATTAGCCAGGTGTGGT 2460 2401 ACTGCACAACACAGTGAGACCTCGTTTCTACAAATTAAAAAATTAGCCAGGTGTGGT 2460 2401 ACTGCACAACACAGTGAGACCTCGTTTCTACAAATTAAAAAATTTGCCAGGTGTGGT 2460 2461 GGTGCACACCTGTTGTTTCTACAAATAATTAAAAAATTTGAGACTG 2520 2461 GGTGCACACCTGTTGTTTCTAGGAGGCTGAGGTAGTTGTTTTGAGACTG 2520 2461 GGTGCACACCTGTTAGTTCCAGGAGGCTGAGGTAGTTAGAAATTTGAGACTG 2520	2521 GGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAG 2580 [	2701 GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTTATCAACGAATTCTTAT 2760 2701 GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTTTTAACGAATTCTTAT 2760 2701 GACTCCAGATAACTCATTTGCTGTATACACATTTTGCCTCTTTTTATTCTTAT 2760 2761 GCCCTCTTGTGGTGATTTTAATGTGCGGAAGGAAACAATAGAAATTTTGCAATTCTAGA 2820 2761 GCCCTCTTGTGGTGTTTTAATGTGCGGAAGGAAACAATAGAAATTTTGCAATTCTAGA 2820 2821 AAAGTCATTCTGTCAAAATATGTGGTCCTGTAGAATATTAGCCAATTTTAGGAAAATGA 2880 2821 AAAGTCATTCTGTCAAAATATGTCGTCCTGTAGAATTTTAGGAAAATGAC 2880 2821 AAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGAAATTTTAGGAAAATGAC 2880	2881 AAAATTTTTACTTTTGGTCTTTGTAGCTGTTTTATGATAAATACCTTATTTGT 2940  2881 AAAATTTTTTACTTTTTGTCTCTGCCTTTTTATGATATAAATACCTTATTTGT 2940  2941 AATAAATTTTTAATTTTGAGTAACAATCTGGAATTATCAGAGAAGGGGCAAGCAA	3001 GGTTAATAAGAGTATTGGTAGAAGGAAGGTTGAAATCCAAGAGCATCAATGTCTT 3061 CTGGTGGTTCACCATAAGCCACAGGAGTGGTTGATCTTTCCGAGATCTAGTTTTTCAG [	3121 3181 3181 3241 3241 3301
6 6 6 6 6 6 6 6	6 6 6 6 6	8 6 8 6 8 6	8 8 8 8 8	4 4 4 4 4	

```
; Search time 1741 Seconds (without alignments) 11676.296 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Prolished Applications Nat.

1. (cgn2_6/ptodata//) pubpna/USO7 PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO7 PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO6_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO6_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/DSO7_NEW_PUB.seq:*

1. (cgn2_6/ptodata///pubpna/DSO7_NEW_PUB.seq:*

1. (cgn2_6/ptodata///pubpna/USO8_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO8_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO8_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO9_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pubpna/USO08_PUBCOMB.seq:*

1. (cgn2_6/ptodata///pub
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3627888 segs, 2701811610 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published Applications NA:*
                                                                                                                                                                                                                                                                                                                November 18, 2004, 18:25:09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                        OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sednence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                     Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 1, Appli	Sequence 800, App	Sequence 125465,	Sequence 125465,		Sequence 526, App	Sequence 31701, A	Sequence 31701, A	Sequence 11, Appl	-		Sequence 1390, Ap
	ID	US-10-005-907-1	US-10-322-281-800	US-10-027-632-125465	US-10-027-632-125465	US-10-322-281-88	US-10-087-192-526	US-10-027-632-31701	US-10-027-632-31701	US-10-428-487-11	US-10-367-094-195	US-10-087-192-1384	US-10-087-192-1390
	DB	15	17	13	15	17	13	13	15	16	17	13	13
	Match Length DB	3762	191584	830	830	58320	63313	810	810	301692	310268		95960
a40 2	Match	100.0	6.2	0.9	9.0	n S	5.5	5.4	5,4	5.4	5.4	5.3	5.3
	Score	3762	234.4	224.6	224.6	207.4	207.4	205	205	203.8	203.8	201.2	201.2
‡	No.	н	0	М	4	Ŋ	9	٢	œ	σ	10	11	12
1000	7		Ö	υ	υ	U	υ	υ	U	υ	υ		

GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG 60 1 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG

ò g ò

13. US-10-087-192-1372 Sequence 1372, Ap. 7239 9 US-09-764-869-2326 Sequence 2326, Ap. 7239 14 US-10-091-1504-2326 Sequence 2326, Ap. 86quence 2326, Ap. 86quence 2326, Ap. 86quence 2326, Ap. 86quence 2326, Ap. 1259 16 US-10-227-577-2326 Sequence 2326, Ap. 1259 16 US-10-087-192-274 Sequence 27, Appl 13. US-10-087-192-274 Sequence 19728, Ap. 1250 10 US-09-864-867-274 Sequence 19728, Ap. 13. US-10-09-864-891-605 Sequence 19728, Ap. 1743 10 US-09-764-891-605 Sequence 236, Appl 1745 15 US-10-091-414-236 Sequence 236, Appl 1746 15 US-10-091-414-236 Sequence 237, Appl 1746 15 US-10-091-414-236 Sequence 237, Appl 1746 15 US-09-764-891-6057 Sequence 46, Appl 1746 15 US-09-764-891-6057 Sequence 46, Appl 1746 10 US-09-764-891-896 Sequence 169, Appl 1750 17 US-10-235-192A-46 Sequence 169, Appl 1750 17 US-10-235-105966 Sequence 105966, Sequ	14 US-10-115-278-1 Sequence 3 US-10-087-192-1486 Sequence 3 US-09-087-192-1486 Sequence 3 US-09-087-192-1486 Sequence 4 US-09-087-192-1481 Sequence 10 US-09-764-872-2670 Sequence 13 US-10-027-632-269156 Sequence 13 US-10-027-632-269156 Sequence 15 US-10-027-632-265848 Sequence 15 US-10-027-632-265848 Sequence 15 US-10-027-632-265848 Sequence 15 US-10-020-141-11 Sequence 14 US-10-017-721-1 Sequence 14 US-10-017-721-1	SULT 1  -10-005-907-1  SQUARD 1. Application US/10005907  Publication No. US20030166881A1  GENERAL INFORMATION:  APPLICANT: Union Chimique Belge, S.A.  APPLICANT: Direction, Richard  APPLICANT: Pirozzi, Gregory  APPLICANT: Pirozzi, Gregory  APPLICANT: Direction, Richard  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TITLE OF INVENTION: 13  SOFTWARE: PACHOLICAL OF ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST  TYPE: DAA  ORGANISM: Homo sapiens  NAME/KEY: CDS  OTHER INFORMATION:  10-005-907-1	100.0%; Score 3762; DB 15; Length 3762; 100.0%; Pred. No. 0; tive 0; Mismatches 0; Indels 0; Gaps 0;
		ESULT 1 5-10-005-907-1 5-10-005-907-1 GENERAL INFORMATION: GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: No. US2003016688 APPLICANT: No. US2003016688 APPLICANT: Pirozzi, Gregory APPLICANT: Einstein, Richar TITLE OF INVENTION: ACTIVAT FILE REFERENCE: 053529-5005 CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2001-1 NUMBER OF SEQ ID NOS: 13 SEQ ID NO 1 LENGTH: 3762 TYPE: DNA ORGANISM: HOMO SADIENS FEATURE: FEATURE: FEATURE: GEATURE: GEATURE: GOGANISM: HOMO SADIENS FEATURE: GOGANISM: HOMO SADIENS FE	100 Similarity 100 62; Conservative
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6	SULT 1 Sequence 1, Applicat Publication No. US20 Sequence 1, No. US20 SEQUENCE INFORMATION: APPLICANT: Union Ch APPLICANT: Pirozzi APPLICANT: Pirozzi APPLICANT: Pirozzi APPLICANT: Einstei TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION: TITLE OF INVENTION: CURRENT APPLICATION CURRENT APPLICATION CURRENT PILING DATE WINMBER OF SEQ ID NO SOFTWARE: PatentIn SEQ ID NO 1 LENGTH: 3762 LENGTH: 3762 TYPE: DNA ORGANISM: HOMO SAP FEATURE: NAME/KEY: CDS LOCATION: (25). (4	Query Match Best Local Sim Matches 3762;
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ს Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ Წ	RESULT 1 US-10-005 SQUENCE PUBLICATE RENERAL APPLICAT APPLICATE APPLICAT AP	Query Best Match

..... rage Blank (uspto)

Search completed: November 18, 2004, 14:08:43 Job time : 1658 secs

280

1930

400

1870

셤

```
The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a parient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the aggressiveness or indolence of prostate cancer in a patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, prostate cancer, cytostatic, carcinogen, pharmacodyanamic marker, pharmacogenomic marker, gene, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           determining whether prostate cancer has metastasized in a patient; (h)
                 GITCAAATAITAGIAAAATIGAAAATAAACTIGIGCITATAITITGITIGCAACACACT
                                           281 AGTIAATITAACCIGIGACIAGITAICICIACCGAAGGIGGAIGIGIAGITICIGGIITT
                                                                                                                                                                                  useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                   <u>AGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 437 BP; 150 A; 63 C; 79 G; 145 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                    TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAG 1967
                                                                                                                                                                                                                                                                                          TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAG 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human prostate expression marker cDNA 40236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 8129; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Monahan
                                                                                                                                                                                                                                                                                                                                                                                                              ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0189862P.
2000US-0207454P.
                                                                                                                                                                                                                                                                                                                                                                                                              ABV40245 standard; cDNA; 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0183319P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0211314P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0219007P
2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alBo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       assessing
                   1751
                                                          221
                                                                                                   1811
                                                                                                                                                                                                                                                                    1931
                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV40245;
                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                             ABV40245
                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                       g
                                               a
                                                                                                ò
                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGACATTGGCTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT 1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a thest compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (d) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAGGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGCATATAAATTGTCAATTTTTTTCTAGCCAACAGAGAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGACATTGGCTTTTCTGAGAGAGAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1691 GAAGCATATATATTGTCAATTTTTTCAATTTTCTAGTCAACAGAAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 5; Length 437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 437 BP; 150 A; 63 C; 79 G; 145 T; 0 U; 0 Other;
376 TIAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 392.2; DB 5;
Pred. No. 1.5e-47;
0; Mismatches 3;
                                                                                                                                                                                                                             Human prostate expression marker cDNA 31600.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 6790; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monahan JE;
                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
2000US-0255281P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 99.2%;
Matches 394; Conservative (
                                                                                                   ABV31609 standard; cDNA; 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US005171
                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                       WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L6-MAR-2000;
                                                                                                                                                                                    16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                            23-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                           ABV31609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schlegel
                                                          RESULT 14
                                                                               ABV31609
```

g

ò g ò

```
TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTG 1976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 397; Conservative
                                                                                                                                                                                                                       ₩
0,
                                                                                                                                                                                                                                             WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                    WO200160860-A2
                                                                                                                                            09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
               Homo sapiens
                                                                                   20-FEB-2001;
                                                                                                            17-FEB-2000;
                                                                                                                      16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                     Schlegel R,
                                                              23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          1692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1932
                                                                                                                                                    The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a text compound to inhibit prostate cancer in a patient; d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
                                                                                              prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                         1573 ATGTACTGGATATTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                        AGGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 AGCATATATATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGAATCGAAGGATTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 TTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancerous state
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                           useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                        Query Match 10.5%; Score 393.8; DB 5; Length 397; Best Local Similarity 99.5%; Pred. No. 8.8e-48; Matches 395; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                Sequence 397 BP; 142 A; 53 C; 64 G; 138 T; 0 U; 0 Other;
                                                                                    with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel isolated nucleic acid molecule associated prostate cells and correlating with presence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human prostate expression marker cDNA 31267
            MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                  Claim 1; Page 1680; 11750pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV31276 standard; cDNA; 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                           WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                            also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                       1633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1933
                                  Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV31276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV31276
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  patient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a pati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1631 TGACATTGGCTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAAAAAAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGCATATATATTGTCAATTTTTCAATTTTCTAGTCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GIICAAAIAIIAGIAAAAAIIGAAAAIAAACIIGIGCIIAIIAIIIIGCIAAACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTCAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAGGTACTTTATATTTTTGCATATAAACTTGCAGTATTTGTTCAAAAATTAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 421 BP; 143 A; 61 C; 71 G; 145 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.4%; Score 392.2; DB 5 97.8%; Pred. No. 1.5e-47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                          (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 6740; 11750pp; English.
                                                                                      2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
2000US-0255281P.
2001WO-US005171
```

ô

g

ò q δ

ò

Ωp

g

ò

q

ò

ò

Dp

ò

```
1630
                                                                                                                                                                                                                                                                                                                                                                                                                       1690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1930
  specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call cardingenic potential of a compound; (g) determining whether prostate cancer as metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
                                                                                                                                                                                                                                                                                                                                                                                                                                                            154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            394
                                                                                                                                                                                                                                                                                                                                                                               94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGCATATATATATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                      CTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                           CGAGGTACTGGATATTTTGCATATAACTTGCAGTAATAGTTCAAAAATTAATAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAATCGAAGGATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GITCAAATAITAGTAAAAATIGAAAATAAACTIGIGCITTATAITITGCIACACACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            275 AGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                            Length 433;
                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                        Sequence 433 BP; 146 A; 64 C; 79 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                          Score 394.2; DB 5;
Pred. No. 7.6e-48;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       prostate expression marker cDNA 10430
                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; 2000US-0183319P.
2000US-0189862P.
2000US-0207459F.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                          10.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; cDNA; 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                        Mat.
Local St.
396;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2001
                                                                                                                                                                                                                                                                                                                                      1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1811
                                                                                                                                                                                                                                                                                                                                                                             35
                                                                                                                                                                                                                                                                                                                                                                                                                 1631
                                                                                                                                                                                                                                                                                                                                                                                                                                                          95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV10439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV10439;
                                                                                                                                                                                                                                                          Query Mat
Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8888888888888
                                                                                                                                                                                                                                                                                                                                                                    D
                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                      6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \ddot{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                      240
                                                                                                                                                                                                 300
                                                                               341
                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ne invention relates to an isolated nucleic acid molecule (I) comprising nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer; cytostatic; carcinogen; pharmacodyanamic marker;
marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tate of useful
                                                                         ATGACTACATTTGAAAGAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC
                                                                                                                  ACTICIAAICAGGAAACGAGAAIGGCAGIGGIICIGAAGAAGAGIGIGCIACACIGICAII
                                                                                                                                          ACTICTAATCAGGAAAAACGAGAATGGCAGTGCTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                             AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                      AATCACATCCCCCATCAAGATCCTCCCTGAGCTCCAATGATGATGATGGCTATGAGAACATT
                                                                                                                                                                                                                                                                       GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAAAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                             GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT
                                                                                                                                                                                                                                                                                                                                              CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCATGAGCATGATTATGAAGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                       crraceaccarcatractacccrratrecrececcarcaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccarcatrareaccar
                                                                                                                                                                                                                                                                                                                                                                                                                           TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated nucleic acid molecule associated with cancerous state prostate cells and correlating with presence of prostate cancer, usef for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prostate cancer, use
e of prostate cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression marker cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGCAGACTCTGGCGAAGTTGTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 295; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MILLENNIUM PREDICTIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV01270 standard; cDNA; 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĕ
M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pharmacogenomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-MAR-2000; 2
25-MAY-2000; 2
09-JUN-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-AUG-2001
                                    121
                                                                           282
                                                                                                                  181
                                                                                                                                                      342
                                                                                                                                                                                           241
                                                                                                                                                                                                                                402
                                                                                                                                                                                                                                                                                                           462
                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                         522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV01270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ношо
```

```
2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2457
                                                                                                                                                                                                                                                                                                                                           2097
                                                                                                                                                                                                                                                                                                                                                                                                              2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTGAG 2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG 1082
                                                                                                                             1917
                                                                                                                                                                                                1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                   722
                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                            662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      962
                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       782
                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 biodiversity assessment; Parkinson's disease; Alzheimer's disease; neurodegenerative diseases; anaemia; platelet disorder; wound; burns; ulcers; osteoporosis; autoimmune disease; cancer; molecular weight marker; food supplement; antiparkinsonian; noctropic; neuroprotective; antianaemic; anticoagulant; thrombolytic; vulnerary; antiulcer; osteopathic; immunosuppressive; antinflammatory; cytostatic;
303 ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACTGCACAACACAGTGAGACCTCGTTTCTTCAAATAATTAAAAATTAGCCAGGTGT
                                                                                                                                                                                                CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                              CCCAAGAAGTITITITAAIGATAIGCCAGCTICCIAAITIGGAGACAAAAGCCITAAITIGA
                                                                                                                                                                                                                                                                                                        543 CAATGCATTCATTATATTTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                            ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                               TITCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGGTCTAAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITCCATACATAATGAGAGGTTGGTAAATGGGATTCAAGTCTAAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transcringararacaccinarcisaarasccisaassaariintaracaarariinaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rgarccgagracritigggaagccaagacaggregarcrcrigagcccaggagritigagg
                                                                                          363 TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                             423 AGTITCIGGITITAAAATICAAGCAAACIGGAAAATAAICCAICTAAITAIGCITICITI
                                                                                                                                                                                                                                                                      CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                           CAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                       TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; diagnostic; drug screening; forensics; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1083 Actidedaderridadecreaacticadecradearcridecaccaca 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human novel cDNA sequence, SEQ ID NO:842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADC30760 standard; cDNA; 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-2003
                                                                                                                                                                                                    1918
                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                                                                                                           2038
                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2517
                                                                                                                               1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADC30760
                                                         1798
                                                                                                                                                                                                                                                                                                                                                                                                                   2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADC30760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                        셤
                                                                                                                               ò
                                                                                                                                                               g
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                         à
```

```
The invention relates to 971 novel human cDNA sequences (ADC29919-ADC31889) and the polypeptides they encode (ADC30890-ADC31860). The ADC30889) and the polypeptides they encode (ADC30890-ADC31860). The invention also relates to nucleic acid sequences over 99% identical with the novel human cDNAs. The invention additionally encompasses expression vectors and host cells comprising a nucleic acid of the invention; the recombinant production of a polypeptide of the invention; an antibody against a polypeptide of the invention; an antibody against a polypeptide of the invention; an antibody against a polypeptide of the invention; and methods of invention further discloses methods to a polypeptide of the invention. The invention further discloses methods of peventing, treating or and/or monoclonal antibodies for carrying out the methods of the invention; methods for the identification of compounds that modulate the expression or activity of the polymcleotide and/or polypeptide; and 767 contig sequences corresponding to the CDNA sequences of the invention of ADC31861-ADC3262) and the polypeptides encoded by the contigs (ADC32628 -ADC33394). The nucleic acids and polypeptides encoded by the contigs (ADC32628 -ADC3381) and the polypeptides encoded by the contigs (ADC32628 -ADC3381). The nucleic acids and polypeptides of the invention are useful in diagnostics, drug screening, forensics, gene mapping, in the captains, for assessing blodiversity, and in producing many other types of data and products dependent on DNA and amino acid sequences. They are also used for treating diseases such as Parkinson's disease, Alzheimer's diseases and other neurodegenerative diseases, andemed for treating diseases such as Parkinson's diseases, and they are also used for treating diseases such as Parkinson's diseases, and they are also and other neurodegenerative diseases, andemed for treating diseases and other neurodeservers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or cancer. The nucleic acids may also be used as hybridisation probes or primers, and in the recombinant production of a protein. The polypeptides are also useful in generating antibodies, as molecular weight markers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and as food supplements. The present sequence represents a specifically calined human cDNA sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polynucleotide and polypeptide useful for diagnosing, preventing or treating conditions such as neurodegenerative diseases, anemias, platelet disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                 Wehrman T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 667 BP; 216 A; 147 C; 154 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                        Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13.5%; Score 506; DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.8e-64;
                                                                                                                                                                                                                                                                                                                                    AJ, Zhao QA,
, Asundí V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ilarity 100.0%; Pred. No. 6.8
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 842; 1185pp; English.
gene therapy; chromosome 1; gene; ss.
                                                                                                                                                                                                                                                                                                                                    , Ren F, Xue AJ,
Wang D, Ma Y,
Drmanac RT;
                                                                                                                                                                                       24-SEP-2002; 2002WO-US030474.
                                                                                                                                                                                                                                         24-SEP-2001; 2001US-0324631P
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-371981/35.
                                                                                                                                                                                                                                                                                                                                    Zhang J,
Ghosh M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 506; Conserv
                                                                                                                                                                                                                                                                                         HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                   Haley-Vicente D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; ADC31731
                                                                                               WO2003029271-A2.
                                               Homo sapiens.
                                                                                                                                               10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             162
                                                                                                                                                                                                                                                                                                                                      rang TY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer.
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

ö

221

à

cytostatic; carcinogen; pharmacodyanamic marker; gene; 88.

prostate expression marker cDNA 26644.

```
Human; prostate cancer;
pharmacogenomic marker;
                                                            WO200160860-A2.
                                                                          23-AUG-2001
        Нишап
                                            Homo
ò
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                              1917
                                    1737
                                                                                                                                                             1977
                                                                                                                                                                                         CAATGCATTCATTATATTTTTTTTTGTATAGTTACAGTATACGAGTTGAGTATCCCTTAG 2037
                                                                                                                                                                                                                                                         2157
                                                                                                                                                                                                                                                                                       2217
                                                                                                                                                                                                                                                                                                                      2277
                                                                                                                                                                                                                                                                                                                                                                                 2397
                                                                                                                                                                                                                                                                                                                                                                                                                2457
                                                                                                                                                                                                                         TATTICAAGICAGGCTCAAAAAGTITCAGAIGTTAAGCTGGTGATGCAGTICATGCCAG 2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                         662
                                                                                362
                                                                                                               422
                                                                                                                                              482
                                                                                                                                                                                                           602
                                                                                                                                                                                                                                                                962
                                                                                                                                                                                                                                  243 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                               ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                               ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                              TITGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                          TTTGCAACACACTAGTTAATTTAACTGGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                            CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                        CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                        CAATGCATTCATTATATTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                  TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                      TTTCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                    TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                              TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                TATTICAAGICAGIGCICAAAAAGITICAGAIGITAAGCIGGIGAIGCAGITCAIGCCAG
                                                                                                                                                                                                                                                                                                                                                                               TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                             CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2517 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
    1618
                                                                                              1798
                                                                                                             363
                                                                                                                            1858
                                                                                                                                            423
                                                                                                                                                                                                         543
                                                                                                                                                                                                                                       603
                                  1678
                                                                1738
                                                                                                                                                           1918
                                                                                                                                                                                          1978
                                                                                                                                                                                                                                                      2098
                                                                                                                                                                                                                                                                                     2158
                                                                                303
                                                                                                                                                                          483
                                                                                                                                                                                                                        2038
                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                   2218
                                                                                                                                                                                                                                                                                                                                                  2278
                                                                                                                                                                                                                                                                                                                                                                843
                                                                                                                                                                                                                                                                                                                                                                                2338
                                                                                                                                                                                                                                                                                                                                                                                                              2398
                                                                                                                                                                                                                                                                                                                                                                                                                                            2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1083
                                                                                                                                                                                                                                                                                                   723
                                                                                                                                                                                                                                                                                                                                  783
                                                                                                                                                                                                                                                                                                                                                                                              903
                                                                                                                                                                                                                                                                                                                                                                                                                             963
                 g
                                 ò
                                                          ò
                                                                          QQ
                                                                                             δ
                                                                                                         임
                                                                                                                         \delta
                                                                                                                                         g
                                                                                                                                                        \delta
                                                                                                                                                                    g
                                                                                                                                                                                        ò
                                                                                                                                                                                                   Db
                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                               연
                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                            S a
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                          DP
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                       ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음
```

```
1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the selecting a compound to inhibit prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1738 ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTG 1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATITITICITITICIATGIACIGGATATITITIGCATATAAACITIGCAGTAATAGTICAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1678 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 AAAAAGAIGAAAIGAAGCATATATAAATIGICAATITITICAATITITICAGCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28.4%; Score 1068; DB 5;
98.0%; Pred. No. 1.7e-144;
iive 0; Mismatches 20;
                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PREDICTIVE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 5383; 11750pp; English.
                                                                                                                                                                                                                                                                                     Monahan JE;
                                                2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
                                                                                                                                                        2000US-0219007P.
2000US-0255281P.
20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Rest Local Similarity 98...
                                                                                                                                                                                                                                                                                     Endege WO,
                                                                                                                                                                                                                                                                                                                                        WPI; 2001-662795/76
                                                  17-FEB-2000;
16-MAR-2000;
25-MAY-2000;
                                                                                                                          09-JUN-2000;
                                                                                                                                                                             13-DEC-2000;
                                                                                                                                                                                                                                                                                     а,
                                                                                                                                                                                                                                                                                  Schlegel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

BP

CDNA; 1128

ABV26653 standard;

(first entry)

16-SEP-2002

ABV26653;

ABV26653 XX XX AC ABV2 XX DT 16-9

```
1083 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                      1128
                                                                                                                                                                                                                                          20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                          2000US-0219007P
                                                                                                                                                                                                                                                                                                                   2000US-0255281P
                                                                                                (first entry)
                                                      CDNA;
                                                                                                                                                                                                                                                                                                                                                                Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-662795/76
                                                      ABV26275 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 1102; Conserv
                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                   25-MAY-2000;
                                                                                                                                                                                                                                                                                                         18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                              17-FEB-2000;
16-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                Schlegel R,
                                                                                                16-SEP-2002
                                                                                                                                                                                                                     23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                            ABV26275
                                            ABV26275
                                 RESULT
                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                         1797
                                                                                                                                                                                                                                                                                                1917
                                                                                                                                                                                                                                                                                                                                           1977
                                                                                                                                                                                                                                                                                                                                                                                     2037
                                                                                                                                                                                                                                                                                                                                                                                                                                2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG 1082
                                                                                                                                                                1737
                                                                                                                                                                                                                                                      1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277
                                                                             1617
                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         962
                                                                                                182
                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                      482
                                                                                                                                                                                                                                                                                                                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrrccaracararaaagagagagaragaraargggarrccaagrccraargargargcac 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATTTCAAGTCAGTGCTCAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACTGCACACACACAGTGAGACCTCGTTTCTTCAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                            CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTCCATACATATAATGAGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                               <u> Arcgaaggaircigircaaatartagraaaarigaaaataaaciigigcitatatitiig</u>
                                                                                                                                                                                                                                                      TITGCAACACACTAGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                 cccaagaagririraargarargccagcriccraarrirggagacaaaagccrraarrga
                                                                                                                                                                                                                                                                                                                                                                                     CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                          CAATGCATTCATTATATTTTTTTTTTATAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGATCTTTGGGACCAGAAGTGTTTTGGATTTCAGATTTTATTTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                  CTACTCAATAAACTGTGTGAAGACCAGTGACCAGACCTTTGCTAACCTGACATTTACTTC
                                                  CTACTCAATAAACTGTTAAAAACCAGTGAACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                             AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                AATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAACTTGCAGTAATAGTTCAAA
                                                                                                                                            AATTAATAGTTTTTGACATTGGCTTTTTCTGAGAAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                 AAAAAGATGAAATGAAGCATATATATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                          TTTGCAACACACTAGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2517
                                  1498
                                                                             1558
                                                                                                  123
                                                                                                                       1618
                                                                                                                                             183
                                                                                                                                                                 1678
                                                                                                                                                                                                          1738
                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                      1798
                                                                                                                                                                                                                                                                           363
                                                                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                                                           1918
                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                       1978
                                                                                                                                                                                                                                                                                                                                                                                                                                 2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1023
                                                       63
                                                                                                                                                                                                                                                                                                  1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                     603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                            Ωp
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                  à
                                                      d
                                                                             à
                                                                                                g
                                                                                                                      ò
                                                                                                                                           g
                                                                                                                                                                 ð
                                                                                                                                                                                  d
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                    õ
```

```
1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV6213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of frostate cancer in a patient; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the efficacy of an inhibit prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate calc arcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (i) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                 Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123 AATTTTTCTTTTTCTATGTACTGGATATTTTTGCATATAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cracroaaraacrordaaaaccaacaacaacaaccorrrocraaccroaacarrracrro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cracaaartraaargcaacarcreccarccaa-raccrarrraargraggggraar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28.4%; Score 1068; DB 5;
larity 98.0%; Pred. No. 1.7e-144;
Conservative 0; Mismatches 20;
prostate expression marker cDNA 26266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 5313; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
```

```
1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT 1497
   CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28.4%; Scor. v 98.0%; Pred. No. 1... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 3347; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Œ,
                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monahan
                                                                                                                                                                                                                                                                                                                                                           2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
                                                                                                                                                            CDNA; 1128
                                                                                                                                                                                                                                                                                                                                         20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0219007P.
2000US-0255281P.
                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                               cancer; c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 1102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Endege WO,
                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-662795/76
                                                                                                                                                            ABV20439 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                               Human; prostate
pharmacogenomic
                                                                                                                                                                                                                                                                                                WO200160860-A2.
                                                                                                                                                                                                                                                                                                                                                              17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                         16-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                 25-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                      18-JUL-2000;
                                                                                                                                                                                                     13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Schlegel R,
                                                                                                                                                                                                                                                                                                                    23-AUG-2001
   2398
                                           2458
                                                               1023
                                                                                    2517
                                                                                                         1083
                        963
                                                                                                                                                                                ABV20439
                                                                                                                                                                                                                                                                            Ношо
                                                                                                                                                Op
                                                                                                  g
   8 6
                                    ⋧
                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                             1497
                                                                                                                                                                                                                                                                                                                                                                                            1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2397
                                                                         2,
                                                                                                                                                                             AATTITICITITICIAIGIACIGGAIAITITIGCAIAIAAACIIGCAGIAAIAGIICAA 1617
                                                                                                                                                                                                                                                                                                          1797
                                                                                                                                                                                                                                                                                                                                                   1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2337
                                                                                                                                                                                                                       AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTCAATTTTTCTAGTCAACAGAGA 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAAGAAGTITITIAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                                                   CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTACTTC 122
                                                                                                                                                                                                                                                                                                                                                                                                               482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    842
                                                                                                                                                                                                                                                                                                                           ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG 362
                                                                                                                                                                                                                                                                                                                                                                      422
                                                                                                                                                                                                                                                                                                                                                                                                                                                         542
 the aggressiveness or indolence of prostate cancer in a patient also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTTTTCTTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                            1438 CCAAATTTCAAATGCCAACATCTCCCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                        AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                           CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                    CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                       ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                TITGCAACACACTAGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                    TITGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                         AGTITCTGGTTTTAAAATTCAAGCAAACTGGAAAATAATCCATCTAATTATGCTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITCCATACATATAATGAGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATITICAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTICAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                         7
                              Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                        20; Indels
                                                  Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                    28.4%;
98.0%;
                                                                       Matches 1102; Conservative
                                                             Similarity
 assessing
; (I) is a
                                                                                                                                    1498
                                                                                                                                                                             1558
                                                                                                                                                                                                                       1618
                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                       1738
                                                                                                                                                                                                                                                                                                                                                1798
                                                                                                                                                                                                                                                                                                                                                                                          1858
                                                                                                                                                                                                                                                                                                                                                                                                                                   1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2338
                                                                                                                                                         63
                                                                                                                                                                                                  123
                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                   243
                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          723
8 X G G
                                                                                                            셤
                                                                                                                                   \overset{\circ}{\circ}
                                                                                                                                                   g
                                                                                                                                                                    8
                                                                                                                                                                                             장 염
                                                                                                                                                                                                                                                        $ B $
                                                                                                                                                                                                                                                                                                                    D
                                                                                                                                                                                                                                                                                                                                                                                                      원
상
원
                                                                                                                                                                                                                                                                                                                                             8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            $ g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

2516 1022 1082 The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the pepcification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer. (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker 2 cytostatic; carcinogen; pharmacodyanamic marker; gene; ss. Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer. GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG 5 Length 1128; Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other; ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126 Indels Score 1068; DB 5; Pred. No. 1.7e-144; O; Mismatches 20; Human prostate expression marker cDNA 20430 (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.

```
셤
                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                셤
                             ò
                                                     g
                                                                                   δ
                                                                                                             Q
                                                                                                                                        ò
                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2157
                                                                                                                                                                                                                                                                    1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2097
                                                                                                                                                                                                                                                                                                                            1557
                                                                                                                                                                                                                                                                                                                                                                                  1617
                                                                                                                                                                                                                                                                                                                                                                                                                                        1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAATTITAIGCCIGAAACAGAGITIGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC 2277
                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA 1977
The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether progression of prostate cancer; (b) monitoring the progression of prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (i) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    722
                                                                                                                                                                                                                                                                                                                                                    122
                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTTATACAATATTTTAAA 782
                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTCCATACATATAATGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                          CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                         <u> AATTAATAGTTTTTTGACATTGGCTTTTCTGAGAGAGAAATTGAAAGTGTCACAAAATAA</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAAATTGAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATGCATTCATTATATATTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAATGCATTCATTATATATATTTTTTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                      1438 CCAAATTTCAAATGCCAACATCTCCCCAATCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                               CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                       CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                   AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                  AATTTTTTTTTTTTTTTTTTATGTACTGGATATTTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         243 AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCGAAGGATTCTGTTCAAATATTAGTAAAATTGAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                              Length 1128;
                                                                                                                                                                                    Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                            20; Indels
                                                                                                                                                                                                              Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                                                                                                                                                                                Query Match
28.4%;
Best Local Similarity 98.0%;
Matches 1102; Conservative
                                                                                                                                                                                                                                                                                                                            1498
                                                                                                                                                                                                                                                                                                                                                                                   1558 .
                                                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                         1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2158
                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             723
                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
    ઠે
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                            \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
```

```
2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h)
                                                         2337
                                                                                                                                                                    2397
                                                                                                                                                                                                                                                                                                                                  1022
                                                                                                                                                                                                                                                                                                                                                                                           2516
                                                                                                                                                                                                                                                                                                                                                                                                                                               1082
                                                                                                                                                                                                                    962
     842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1023 GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
783 TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                            TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                    843 TATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                       rgarccgagractrrgggaagccaagacaggragarcrcrrgagcccaggagrrrgaggc
                                                                                                                                                                                                                                                                                                                         963 CAGACTIGCACACACACAGGAGCCCCGTTTCTTCAATAATAATAAAAAAATTAGCCAGGGGG
                                                                                                                                                                    TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                 CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                           GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 3412-3413; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expression marker cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Œ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20000S-0189862P.
20000S-0207454P.
20000S-0211314P.
20000S-0219007P.
20000S-0255281P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV20806 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
⊗
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-662795/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1083
                                                                                                                                                                         2338
                                                                                                                                                                                                                                                                                    2398
                                                                                                                                                                                                                                                                                                                                                                                              2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Schlegel
                                                               2278
                                                                                                                                                                                                                             903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABV20806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
```

```
2217
                                                                                                                                       2277
                                                                                                                                                                                                       2337
                                                                                                                                                                                                                                                                       2397
                                                                                                                                                                                                                                                                                                                                      2457
                                                                                                                                                                                                                                                                                                                                                                       1022
                                                                                                                                                                                                                                                                                                                                                                                                      2516
                                                                                                                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                      902
                                                                                                       782
                                                                                                                                                                                                                                                                                                     962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                TTTCCATACATATAATGAGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                       TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATATACAATATTTAAA
                                                                                                                                    TAATITITATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                         TAATTTTATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
     TTTCCATACATATAATGAGAGATTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                    TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                   TATTTCAAGTCCAGAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                    TATITICAAGTCAGTGCTCAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                   TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                     TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                   GGTGGTGCACACCTGTAGTCCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expression marker cDNA 20608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 3379; 11750pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monahan JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       踞
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV20617 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PREDICTIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0183319P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0255281P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Endege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MILLENNIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-MAR-2000; 2
25-MAY-2000; 2
09-JUN-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-AUG-2001
                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2517
     2098
                                     663
                                                                    2158
                                                                                                   723
                                                                                                                                    2218
                                                                                                                                                                     783
                                                                                                                                                                                                   2278
                                                                                                                                                                                                                                                                   2338
                                                                                                                                                                                                                                                                                                                                   2398
                                                                                                                                                                                                                                                                                                                                                                                                  2458
                                                                                                                                                                                                                                                                                                                                                                                                                                 1023
                                                                                                                                                                                                                                                                                                  903
                                                                                                                                                                                                                                                                                                                                                                   963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV20617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MILL-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                        g
                                                        8
                                                                                            셤
                                                                                                                                  ò
                                                                                                                                                          g
                                                                                                                                                                                           ò
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                         The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV0010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (d) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTITITCTITITCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAGAIGAAAIGAAGCATAIAIAATIGICAAITITITCAAITITICIAGICAACAGAGA 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                            Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAGAAGTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCAAGAAGTITITITAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1438 CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAGATGAAATGAAGCATATAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITGCAACACACTAGTTAATTTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGAGTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATGCATTCATTATATATTTTTTTTTAGTTACAGTATACGAGTTGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAATGCATTCATTATATATTTTTGTATACATTACAGTATGAGTATGAGTATCCCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTGGATTTTTGGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTCAGATTTTTTGGATTTTTGGATTTTTGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                Length 1128;
                                                                                                                                                                                                                                                                                                                                                                            Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                                                                                             Claim 1; Page 5346-5347; 11750pp; English
 ĴE;
 Monahan
                                                                                                                                                                                                                                                                                                                                                                                                             28.4%;
98.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity 98.0
Matches 1102; Conservative
 ¥0,
Endege
                              2001-662795/76
ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
```

8 & 8

26 de 26

8 6 B

8 8

\$ B \$

```
2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1082
                                                                                                                                                                                                                                                                                                                                                                                                                 2337
                                                                                                           2097
                                                                                                                                                                                        2157
                                                                                                                                                                                                                                                                2217
                                                                                                                                                                                                                                                                                                                                        2277
                                                                                                                                                662
                                                                                                                                                                                                                                                                                                     782
                                                                                                                                                                                                                                                                                                                                                                              842
                                                                                                                                                                                                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              962
 542
                                                                                                                                                                                                                           722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker; pharmacogenomic marker; gene; ss.
483 CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                   TATITICAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGGTGCACACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
                                                        543 CAAIGCAFICATHAFAFAFTTFTFGFAFAGTFACAGFAFACAGAGFTGAGTATCCCFTAG
                                                                                                                                                                                                                                                                                                                                        TAATTITATGCCTGAAACAGAGTTTGCGCACCATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                              TATITICAAGTCAGTGCTCAAAAAGTITICAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cagactecacacacacagagaccrcgrrrcrrcaarraarraaaarragccaggrgr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTGAG
                                       CAATGCATTCATTATATTTTTTTTTTTATAGTTACAGTATCCAGTTGAGTATCCCTTAG
                                                                                                               ATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTTCAGATTTTATTTTTGGATTTTGGAATA
                                                                                                                                                                                         TTTCCATACATATAATGAGAGAGTTGGAAAATGGGATTCAAGTCTAATCATAAAATTCAC
                                                                                                                                                                                                                             663 TTTCCATACATATAATGAGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                                TTATGTTTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTCTTGAGCCCCAGGAGTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTEGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human prostate expression marker cDNA 26449.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0183319P.
2000US-0189862P.
2000US-0207454P.
2000US-0211314P.
2000US-0219007P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200160860-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-FEB-2000;
16-MAR-2000;
25-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-JUN-2000;
18-JUL-2000;
13-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-AUG-2001
                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                            2218
                                                                                                                                                                                                                                                                                                                                                                                 783
                                                                                                                                                                                                                                                                                                                                                                                                                     2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2517
                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                    2158
                                                                                                                 2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABV26458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV26458;
                                         1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABV26458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                     ò
                                                                          g
                                                                                                                 ò
                                                                                                                                                  g
                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAAGAAGTITITITAATGATATGCCAGCTICCTAATTTGGAGACAAAAGCCTTAATTGA 1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is affilicted with prostate cancer; (b) monitoring the progression of prostate cancer; (b) monitoring the efficacy of a therapy for inhibit ing prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate call carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (l) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                    Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer, stage of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATITITICITITICIATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAGATGAAATGAAGCATATATAAATTGTCAATTTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATTTTTCTTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAGATGAAATGAAGCATATATATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCGAAGGATTCTGTTCAAATATTAGTAAAAATTGAAAATAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arcdaaggarrcrearrarragraaaarrgaaaaraaacrrgrecrrararrrrg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTAATAGTTTTTGACATTGGCTTTTCTGAGAGAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGCAACACACTAGTTAATTTAACCTGTGACTAGTTATCTCTACCGAAGGTGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 28.4%; Score 1068; DB 5; Length 1128; Best Local Similarity 98.0%; Pred. No. 1.7e-144; Matches 1102; Conservative 0; Mismatches 20; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                      (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                                                                                                              1; Page 5285-5286; 11750pp; English
                                                                                                                                                                                           Endege WO, Monahan JE;
                                     16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
09-UTN-2000; 2000US-021134P.
18-UTU-2000; 2000US-0259007P.
13-DEC-2000; 2000US-0255281P.
                       2000US-0183319P
                                                                                                                                                                                                                               WPI; 2001-662795/76
                                                                                                                                                                                           Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              423
                                                                                                                                                                                                                                                                                                                                              Claim
```

셤

8 6 8 6 8 6 8 6 8 6

ઠ

상 임 ò

```
1917
                                                                                                                                                        1977
                                                                                                                                                                                                                            2037
                                                                                                                                                                                                                                                                                                2097
                                                                                                                                                                                                                                                                                                                                                                  2157
                                                                                                                                                                                                                                                                                                                                                                                                                                      2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2397
                                                                                                                   482
                                                                                                                                                                                                                                                             602
                                                                                                                                                                                                                                                                                                                                 662
                                                                                                                                                                                                                                                                                                                                                                                                     722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pharmacodyanamic marker;
                                                                                                                                                                                                                                            CCCAAGAAGTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                     CCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAATTTGGAGACAAAAGCCTTAATTGA
                                                                                                                                                                                                                        CAAIGCATICATIAIATATITITIGIAIAGTIACAGIALACGAGIIGAGIAICCCITAG
                                                                                                                                                                                                                                                                                            AIGAGAIGCITGGGACCAGAAGIGITTTGGAITTTCAGAITTTATTTTGGAITTTGGAATA
                                                                                                                                                                                                                                                                                                                        TITCCATACATATAATGAGAGTTGGAAAATGGGATTCAAGTCTAATTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                    TTAIGITTGATATACACCTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transmingararacaccinarcisaarasccisaassiaarintraracaaratiriaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTICAAGICAGIGCICAAAAAGITICAGAIGITAAGCIGGIGAIGCAGITCAIGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGG-TAGTAGGATTGTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1023 GGTGGTGCACCTGTAGTTCCAGGTACTCATGAGGCTGAGGTTATTGGGATTGTTTGAG
                                             TITIGCAACACACTAGTIAATTITAACCIGIGACTAGTITATCTCTACCGAAGGTGGATGTGT
                                                                                AGTITCIGGITITIAAAATICAAGCAAACIGGAAAAIAAICCAICIAAITAIGCITITCITI
                                                                                                                     TITCCATACATATAATGAGAGAGTTGGTAAATGGGATTCAAGTCTAATCATAAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATTITIATGCCTGAAACAGAGTTTGCGCACATTGGACCATCAGAAAGCAGAAGTGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATITICAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCCAGGAGTTTTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACTGCACACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2517 ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACA 2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; prostate cancer; cytostatic; carcinogen;
pharmacogenomic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human prostate expression marker cDNA 26121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV26130 standard; cDNA; 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2001; 2001WO-US005171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-AUG-2001
            1798
                                            363
                                                                                1858
                                                                                                                                                    1918
                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                            2038
                                                                                                                                                                                                                                                                                                                             603
                                                                                                                                                                                                                                                                                                                                                                2098
                                                                                                                                                                                                                                                                                                                                                                                                   663
                                                                                                                                                                                                                                                                                                                                                                                                                                    2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963
                                                                                                                 423
                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
ABV26130
                                  원
                                                                   ò
                                                                                                      g
                                                                                                                                                ò
                                                                                                                                                                            g
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether a patient is affilicted with prostate cancer: (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cancer has metastasized in a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (i) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; carcinogen; pharmacodyanamic marker; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated nucleic acid molecule associated with cancerous state of prostate cells and correlating with presence of prostate cancer, useful for detecting presence of prostate cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCGAAGGATTCTGTTCAAATATAGTAAAATTGAAAATTGAAAACTTGTGCTTATATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATTAATAGTTTTTGACATTGGCTTTTCTGAGAGAGAAATTGAAAGTGTCACAAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAAATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTTGAGGTGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATTTTTCTTTTCTATGTACTGGATATTTTTGCATATAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAACTTGCAGTAATAGTTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACAAATTTAAATGCAACATCTGCCCATCCAA-TACCTATTTCATCTTTGAGGGGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAAGATGAAATGAAGCATATATTAATTGTCAATTTTTTCAATTTTTCTAGCCAACAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1128 BP; 354 A; 180 C; 216 G; 374 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1068; DB 5;
Pred. No. 1.7e-144;
0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                      (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 3320-3321; 11750pp; English.
                                                                                                                                                                                                                                                                                                                                                            Monahan
                                                                                                                                                                                             17-FEB-2000; 2000US-0183319P.
16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
09-JUN-2000; 2000US-0211314P.
18-JUL-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                                                                                                                                               20-FEB-2001; 2001WO-US005171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28.4%;
ilarity 98.0%;
Conservative
         Human; prostate cancer;
pharmacogenomic marker;
                                                                                                                                                                                                                                                                                                                                                          Endege WO,
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-662795/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                       Schlegel R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 1102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123
                                                        Ношо
```

g

90 yo

8

qq

8 8

8 8 8

us-10-005-907-1.rng

ద ठे 셤 ò 9 ð g à 셤 ò g ਨੇ P 8 8 ò g ò g ò a ठे g à g ò g g à ਨੇ a q a ਨੇ ò The invention relates to isolated nucleic acid (ABNB119-ABNB124), accresponding to genes differentially expressed in mast cells following activation or in patients with allergic hypersensitivity disease, (I) that encodes proteins (ABB77559, ABB77575) (II) or a protein fragment of that encodes proteins (ABB77575) (II) or a protein fragment of that least 6 amino acids. (II) is useful for identifying binding patrers. (I) or (II) is useful for identifying binding patrers. (I) or (II) is useful for disease state (e.g. allergic hypersensitivity, seasonal rhintis, asthma, involves determining the level of expression of (I) or (II). A computer system, comprising a database containing information identifying the system, comprising a database containing information identifying the systems. Or presenting information to identify the relative expression level of (I). (II) is used as a marker to identify the relative expression level of (I). (II) is used as a marker to detect, diagnose or identify an allergic modulate gene expression or activity and as an antigen to raise polyclonal or monoclonal antibodies. (II) is useful for identifying agents that modulate expression of the protein or agents that medulate expression of the protein or agents are useful for modulating biological activity and dinction of (II) and thus are useful contained within antibodies or antagonists are useful for easonal rhinitis. 120 180 240 240 300 360 360 420 420 480 540 099 480 600 9 seasonal rhinitis, asthma, urticaria, atopic dermatitis or mastocytosis GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG ATGACTACATTTGAAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC ATGACTACATTGAAAGAAAACTTCAAGATCAAGATAAGAAAAAGCCAAGAAGTTTCATCC TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAAACATTCCTTTCTGGCTA ACTICIANTICAGGAAAACGAGAATGGCAGTGCTTCTGAAGAAGTGTGCTACACTGTCATT AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT AATCACATCCCCCATCAGAGATCCTCCTGAGCTCCAATGATGATGGCTATGAGAACATT CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCCATGAGCATGATTATGAAGTTGTG TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA TAGCAGACTCTGGCGAAGTTGTTCACCCTGAGCAGTGCATGAACATTCCTTTCTGGGCTA GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG **ACTICIDATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT** GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGACAGAATATGCCCTT TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA AAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG AAGTITAGAAATAITATTATTATATATCCTTAGGCAACTCTGATATGTGGCATCTCTG TGGCTTAGGTGAAATCATAGAAATTGACAATGACCTAAAATATTCTATGTGTTTTTTGC ; 0 Length 3762; Sequence 3762 BP; 1220 A; 672 C; 680 G; 1190 T; 0 U; 0 Other; Indels DB 6; ·. 100.0%; Score 3762; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches Best\_Local Similarity Matches 3762; Conserv 61 121 181 241 Query Match 61 121 181 241 301 301 361 361 421 421 481 601 601 481 g qq  $\delta$ a ò 9 6 a SP G D a g g ò  $\delta$  $\delta$ ò d à

1020 1020 1080 1140 1200 1200 1440 1080 1260 1260 1320 1380 1380 1440 1500 1620 1620 1680 1680 AAGATGAAATGAAGCATATAAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAGAATC 1740 1741 GAAGGATTCTGTTCAAAATTAGTAAAATTGAAAATAGAAATAGTCTTGTGCTTATATTTTGTTT 1800 720 780 780 840 900 900 096 960 720 TGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA CCTCRGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACCC TIGHTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCTATAAGACT CAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAACTTTGAATCTACCTATGACCT TTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAAAACTTTCTTAGGACAATAATGTAAAA TGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGACCCTCTTCTAGGCCAAAGAGA CCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACCC TTGTTATACCCCTTCCCTTTTGGAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACT CTGGTGTAGAT GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACTTGGTGTAGAT CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT CACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCTACATAACAGAGACCTTGGTT TCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTCTACTGACTTCTTAAAGTCTTTAGA CAAAGCTTAACTCTTTCAACCAATTGCCAATCAAGACAAACTTTGAATCTACCTATGACCT GTAAGCTCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA TTTAATGATTTATGTCTTTGCTTGTAACTCCTGTCTCCCTAAAATGTATAAAAGTAAACG GTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGAGTGTATCCCAGGCCAT GTGACCTGACCACCTCAGGCACACTTTCTCAGGACCTCCTGAGGGTGTATCCCAGGCCAT GGTAAGTCATGGTCAGAATCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTTGG GGTAAGTCATGTTGGCTCAGAATCAACCTCTTTAAATATTTTTACAGAATTTGGGTTTTTGG TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA TTACCAATAAGTCTCCACAAATATATGTCCAAGAATCTTCAATTCCAAGCCTGCTCACCA GTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCA AATTTCAAATGCCAACATCTCCCCATCCAATTACCTATTTCATCTTGAGGTGTAATCTA CTCAATAAACTGTGTAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT TAATAGTTTTTGACATTGGCTTTTCTGAGAAGAGAAATTGAAAAGTGTCACAAAATAAAAA 1681 AAGATGAAATGAAGCATATATAATTGTCAATTTTTTCAATTTTTCTAGTCAACAGAATC CTCAATAAACTGTGAAGACCAGTGACCAGACCCTTTGCTAACCTGACATTTACTTCAAT TITICITITICIATGIACIGGAIAITITIGCAFAIAAACTIGCAGIAATAGITCAAAAI TITICITITICIAIGIAGAIATITITIGCAIAAAACTIGCAGTAATAGITCAAAAAT GATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCCAACCTGACT 661 721 781 841 901 196 1021 1021 1081 1081 1141 1141 1201 1201 1321 1381 1381 1441 1441 661 721 781 841 106 961 1261 1261 1321 1501 1561 1501 1621 1681 1561

OM nucleic

Run on:

Sequence:

```
Ade47520 Human car
Ab567711 Human sec
Adf69677 Human SLC
Aai61012 Human Drz
Aai62586 Human brz
Aai62587 Human brz
Aai62587 Human rep
Aas67380 Human gen
Abs7380 Human gen
Abv30769 Human pro
Abv39968 Human pro
Abv30990 Human pro
Abv30990 Human imm
Abv23873 Human pro
Abv239715 Human pro
Abv29715 Human pro
Abv24256 Human pro
Abv24256 Human pro
Abv24266 Human pro
Abv24266 Human pro
Abv24266 Human ner
Aba14664 Human ner
Aba14664 Human ner
Aba14664 Human ner
                                                                                                                                                                                                                                                                                               Human; mast cell; MC; antiallergic; antinflammatory; antiasthmatic;
vasotropic; dermatological; allergy; hypersensitivity; rhinitis; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel isolated nucleic acids that are differentially expressed in mast cells in patients with allergic hypersensitivity, encoding proteins associated with mast cell regranulation and allergic hypersensitivity.
                                                                                                                                                                                                                                                                                  Human mast cell related gene MC1 SEQ ID NO 1.
                                                                                                                                                                                                 ALIGNMENTS
                                                                                                  ADE47520
ABZ67711
                                                                                                                                                                   ABS73149
ADL08127
                ABV09816
ABV30990
AAK70219
                                     ABV23873
ABV23839
ABV29715
ABV29752
ABV24256
ABA14585
ABA14664
                                                                                                                 ADF69677
                                                                                                                               AAI62586
AAL03368
                                                                                                                                                    AAL03369
AAS07380
                                                                                                                         AAI61012
                                                                                                                                               AA162587
          ABV39958
                                                                                          AAS36826
                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
25. .432
                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                   /product= "MC1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Einstein
                                                                                                                                                                                                                                       ABN81319 standard; cDNA; 3762
                                                                                                                                                                                                                                                                                                                                                                                                                             08-DEC-2000; 2000US-0251835P.
14-MAR-2001; 2001US-0275479P.
28-MAR-2001; 2001US-0279115P.
02-APR-2001; 2001US-0280143P.
                                                                                                                                                                                                                                                                                                                                                                                                                07-DEC-2001; 2001WO-US046180.
                                4 N N N N N N N A H H H O O O O O
                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                              ಥ
        1743
1743
1746
1746
66685
66686
166043
                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nocka K, Pirozzi G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-508560/54.
P-PSDB; ABB77569.
   (UNIO ) UCB SA.
                                                                                                                                                                                                                                                                                                                                                                                   WO200246389-A2
                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                    30-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                 13-JUN-2002
   gene; ss.
                                                                                                                                                                                                                                                     ABN81319;
                                                                                                                                                                                                                        RESULT 1
ABN81319
   0000000
                                                                                                                                                                                                                                               O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pro
                                                                                                                                                                                                                                                                                                                                                                                                                        pro
pro
pro
                                                                                                                                                                                                                                                                                                                                                                                                                                               pro
                                                                (without alignments)
11939.735 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
                                                                                                                                                                                                                                                                                                                                                                                                  Abn81319 Human
                                                                                                                                                                                                                                                                                                                                                                                                           Abv20298 Human
Abv26130 Human
                                                                                                                                                                                                                                                                                                                                                                                                                        Abv26458 Human
Abv20617 Human
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                   1 gagaaaccgagtcactgtga.......3aaaaaaaaaaaaaaaaaa 3762
                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                        November 18, 2004, 12:17:23 ; Search time 1654 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                       Abv20806
                                                                                                                                                                                                                                                                                                                                                                                                                                               Abv20439
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Abv26275
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Abv26653
           GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                        4134886 seqs, 2624710521 residues
                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV26653
ADC30760
                                         sw model
                                                                                                                                                                                                                                                                                                                                                                                                                        ABV26458
ABV20617
ABV20806
ABV20439
ABV26275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV31609
ABV40245
ABV40577
ABV10104
                                                                                                                                                                                                                                                                                                                                                                                                   ABN81319
ABV20298
ABV26130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV01270
ABV10439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV31276
                                                                                                                    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                genesequ2000s:*
genesequ2001bs:*
genesequ2001bs:*
genesequ2002s:*
genesequ2003as:*
genesequ2003as:*
                                                                                                                                                                                                                                                                                                   geneseqn2003cs:*
geneseqn2003ds:*
geneseqn2004s:*
                                                                                                                                                                                                                          N_Geneseq_23Sep04:*
.: geneseqn1980s:*
: geneseqn1990s:*
                                          nucleic search, using
                                                                                                                                                                    seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10
                                                                                                                                                                                                                                                                                                                                                                                     DB
                                                                                     US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                    Copyright
                                                                                                                                                                                                                                                                                                                                                                              Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                        100.0
                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                               Perfect score:
```

Claim 1; Page 95-97; 119pp; English

ABV00935 ABV09593 ABV00424 ABV39737

Result Š.

Adlo8127 Human gen

Minimum DB Maximum DB

Searched:

Database :

This Page Blank (uspto)

ó 3342

Gaps

3402

397

3462

337

277

3522

217

3582

97

37

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                         q
                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="NCI CGAP Kidl1"
/note="Organ: Kidney; Vector: pT7T3D-Pac (Pharmacia) with
/note="Organ: Kidney; Vector: pT7T3D-Pac (Pharmacia) with
a modified polylinker; Site 1: Not 1; Site 2: Eco RI;
Plasmid DNA from the normalized library NCI CGAP Kid3 was
prepared, and se circles were made in vitro. Following HAP
purification, this DNA was used as tracer in a subtractive
hybridization reaction. The driver was PCR-amplified cDNAs
from a pool of 5,000 clones made from the same library
(cloneIDs 1322376-1323911, 1456007-1456775, and
1500552-1502855). Subtraction by Bento Soares and M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: M. Bento Soares, Ph.D.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution in CI-CGAP clone distribution in CI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:
www-bio.llnl.gov/bbrp/image/image.html
Insert Length: 1086 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       wh68g04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385942 3', AI766257
                                                                                                                                                                              3527 IGIGIGIAAGGCIICITIIAGICAITAIAATAITITIGAGAITCAICIAIGITIAAIGII 3586
                                                                                                                                                                                                                                                                             CTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCAC-CATATAGATATACTATAAT 3645
                                                                                                                                                                                                                                                                                                                                                                         3646 TIGITAATCTAATCACTGATGGATATGTAGGATATTT--AAGTTTTTGACATTATGAATA 3703
                                                                                                                                                                                                                                                                                                                                                                                                                      593 GIGITACTCTAATCACTGATGGATATGTAGGCTAATTGACAGTGTTTGACATTATGATAA 652
                                  414
                                                                                                                                    474
                                                                                                                                                                                                                                GIGIGIGIAAGGCTICTTIAGTCATTATAATA-IGIIGAGATICATCTATGTTTAATG-T 532
                                                                                                                                                                                                                                                                                                                            533 CTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACATATAGATTTACGTATAATT 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 456)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                      415 regraraarraraacrerreragararrigiageagreracerrirecararrrarrige
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq primer: -400P from Gibco
High quality sequence stop: 437.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2385942"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AI766257.1 GI:5232766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ...456
                                                                                                                                                                                                                                     475
                                            355
                                                                                         3467
                                                                                                                                                                                                                                                                                    3587
3408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
AI766257/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
```

```
TGTICTATCAGTAGTIGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTAT 3642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAAT 3702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THIGHGHGHGHGHGHCHTHTHGHGHGHTHTHHGHGHTHCHTCHTHTHAA 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 AATTIGITAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAAT
                                                                                                                                 3283 TCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTT
                                                                                                                                                                                                                                                                                                                      336 CCAGAAAGTTCCACAGAGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGATC
                                                                                                                                                                                                                                                                                                                                                                                                       276 TGCTTCGTATAAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATATTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITGIGIGIGIAAAGGCTICITITAGICATIAIAATATITTTGAGATICAICTATGITTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3343 GICAAAIGIATICACCCAIGIAGICACCICCTIAIGAAGAGACAGAACACGIACAICCIC
                                                                                                                                                                                                                                                                                                 CCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGATC
                                                                                                                                                              IGCITCGIAIAATIAIAACIGITCIAGAIAITIGIAGCAAIGIACCCITICCAIAITIAI
                                                                                             .,
                                                        Length 456;
                                                                                             Indels
                                                      Score 446.6; DB 1;
Pred. No. 5.1e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3703 AAAGTGGCTATAAATGAAAAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGTGGCTATAAATGAATAAAAAAACTACAAA
                                                                                               0; Mismatches
Fatima Bonaldo.
                                                          11.9%;
99.1%;
                                                                                                   Conservative
                                                                                 Similarity
                                                                               Best Local Similariches 449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               3523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3643
                                                                                                                                                                                                                                                                                                                                                                                    3463
                                                                                                                                                                                                                                                                                                       3403
                                                              Query Match
                      ORIGIN
```

g

셤 ð 셤 à

8

g à

ð

completed: November 18, 2004, 21:26:32 ne : 10884 secs Search con Job time

```
Best Local Sim:
Matches 633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                    source
                                                                  SOURCE
                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                        ACCESSION
                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3222 ATCTTTTATGCATATAAATATTTGAACATTTTACATTGTTTATATTTTAATCAGTTTTA 3281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTT 3341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAATGAT 3461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATATTTA 3521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITTGTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGAFTCATCTATGTTTA 3581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGTTCTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTA 3641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3642 TAATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTATGAA 3701
                                                                                                                                                                                                                                                                                                                           /note="Vector: pECBAC1; Site_1: HindIII; This library was constructed from MCF7 breast cancer cell line by Amplicon Express (http://www.genomex.com) using their standard procedure."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCAAGTGTGATTATACAAGAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AIGTTCTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACCATATAGATATACTA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCITITATGCATATATATATGAACATTITACATTGTTTATATTTTAATCAGTTTTA 60
                                                                                                                                                                                                                                                                                                  'clone lib="Human MCF7 breast cancer cell line library (MCF7 \overline{1})"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAACACGTACATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cccagaaagriccacagigcrccrrrrcccraagrircaccagrccragcaaccaardar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTGTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGATTCATCTATGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
   Natl. Acad. Sci. U.S.A. 100 (13), 7696-7701 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                  Score 499.6; DB 8; Length 757; Pred. No. 1.6e-60; 0; Mismatches 9; Indels 0.
                                                                                                                                                This clone is available from Amplicon Express http://www.genomex.com
Class: BAC ends.
                                                                        UCSF Comprehensive Cancer Center
UCSF Box 0808, San Francisco, CA 94143-0808,
Tel: 415 502 7066
Email: svolik@cc.ucsf.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAAAGTGGCTATAAATGAAAAAAAAAAAAAAAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .757
/organism="Homo sapiens"
                                                                                                                                                                                                                                        /mol_type="genomic_DNA"
/db_xref="taxon:9606"
/clone="MCF7_1-3010"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                  13.3%;
ilarity 98.2%;
Conservative
                                            Contact: Volik SV
Colin Collins' lab
                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                22709111
12788976
                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
BF243193
LOCUS
DEFINITION
             MEDLINE
PUBMED
JOURNAL
                                                                                                                                                                                             FEATURES
                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
// Ab zref="taxon:9606"

/ Ab zref="taxon:9606"

/ Ab zref="taxon:9606"

/ Ab zref="IMAGE:4105665"

/ Lissue Lype="from acute myelogenous leukemia"

/ Lab host="DHIOB (TI phage-resistant)"

/ Lone lib="NIH MGC_55"

/ Note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);

Site 1: Sfil (ggcgcctcggcc); Site Sile (lontech);

Site 1: Sfil (ggcgctcggcc); Site Sile (lontech);

Call line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3, adaptor sequence:

2, ATTCTAGGGGGGGGGGGACATG-dT(30)BN-3; (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAGAATCATIGCTGTATAAGTGCTTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTT 3228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3229 ATGCATATAAATATTTGAACATTTTACATTGTTTATTTTTTAATCAGTTTTACTCAAGT 3288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1289 GTGATTATATACAAGAAAATGTAACCACTCTAAGGGTAGAGTTATAAGAATTTTGTCAAA 3348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGAA-CACGTACATCCTCCCAGA 3407
                                                                                                                                                                                                                                                                                                                                             Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLONETECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://imaga-llnl.gov
Plate: LLCM984 row: c column: 10
High quality sequence stop: 546.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 CTAGTITITCAGCAAAGCAGGAITTAAGAAATGTAACTAICTTAIGIGGITATGAAGAAC 120
                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 848)
11 - MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 AATAGAATCATTGCTGTATAAGTGCTTTTTTAACCTGTAAA-TTTGTGAAGCTTATC-TTT 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          237 GTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGT--ATAAGAATTTGTCAAA 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3109 CTAGITITICAGCAAAGCAGGAITIAAGAAATGIAACTAICTIATGTGGGITATGAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3049 CAICAAIGICTICIGGIGGIICACCAIAAGCCACAGAIGICILIAAICITICCGAGAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CATCAAIGICITCIGGIGGIICACCATAAGCCACAGCAGAIGICITAAICTITCCGAGAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  179 AIGCATATAAATATTTGAACATTTTACATGGTT--ATATTTTAATCAGTTTTACTCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.0%; Score 487.6; DB 2;
llarity 90.4%; Pred. No. 7.6e-59;
Conservative 0; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo
BF243193
BF243193.1 GI:11157122
                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .848
                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

BF243193 601877334F1 NIH\_MGC\_55 Homo sapiens cDNA clone IMAGE:4105665 5',

q ö 셤 ò g ò g  $\stackrel{\circ}{\sigma}$ g ò Db ò g

d ò 셤 ò

ò

```
504 bp mRNA linear EST 06-APR-2000 IMAGE:2979975 3', mRNĀ Sequence.
                                                                                                                                                                                                                                                                               1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -TITAAGCIGAA--CCGAIGIGCACIII----CCAITIAAIGAITIAIGICIIIGCIIGIA 1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1060
                                                                                                                                                                                                                                                                                                                                                                                                    478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           539 AACTITGAATICTACCTAIGACCGTGTAAGGCTCTCTCTCGGTTCAAGATCTTTGCCCTC 598
                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                 940
                                         820
                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo. I Chases 1 to 504)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
TTAGGACAATACTGTACAAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGAC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -40UP from Gibo.
High quality sequence stop: 451.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reacticitaagictitagacaaggctiaacctiticaaccaatiggccaatcagaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599 Tritraagcicaaagcccaaricidcaciriricccarrirraargcarraigrcriridgrocra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          299 CCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTITIGAA-TCTACCTATGACC-TGTAAGCTCTCCTGCTTCAAGATCTTGCCTC--
                                                                                                                                                                                                   CCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGCAATAAGAGTCCCAATTCC
                                                                                                                                                                                                                                                                               AACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCCATCTATGAGACTTTGTCT
                                                                                                                                                                                                                                                                                                        419 ACATAACAGAGCCTTGATTTCCACAACCCCTTTATTTTTAGCTAAAGCATTCTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACTTCTTAAGTCTTTAGACA--AAGCTTAACTCTTTCAACCAATT-GCCAATCAGACA
                                       CCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAG
                                                              180 CCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAGACTGAAATTCTGGCCATGATAG
                                                                                                                        240 GAAGGGAGGTGAGACACACTTGTTATACCCCTTCCC-TTTGGAGTTTATGCACAGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCTCA--GGACCTCCTGAGAGTGTATCCCAGGC 1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .504
/organism="Homo sapiens"
/mol_type="mRNn"
/db_xref="taxon:9606"
/clone="thAGE:2979975"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AW665849.1 GI:7458398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          719
                                                                                                                                                                                                                                                                                                                                                                                                                                               1001
                                                                                                                                                                                                                                                                                    941
                                                                                                                          821
                                                                                                                                                                                                       881
                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
AW665849/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
```

```
/clone lib="Soares NFL T GBC S1"
/note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I: Site 2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbHLD9W, testis NHT, and B-cell NCI CGAP GCB1) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-667239, 726408-728711, and 729096-731339. Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       End-sequence profiling: Sequence-based analysis of aberrant genomes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BZ600841 1inear GSS 08-JUN-2003 WHAAAU89TR Human MCF7 breast cancer cell line library (MCF7_1) Homo sapiens genomic clone MCF7_1-3010, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                              3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3458
                                                                                                                                                                                                                                                                                                                                                                  3278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3398
                                                                                                                                                                                                                                                                                                                              o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145
                                                                                                                                                                                                                                                                                                                                                                                                      445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

(bases 1 to 757)

Vollk, S., Zhao, S., Chin, K., Brebner, J.H., Herndon, D.R., Tao, Q., Kowbel, D., Huang, G., Lapuk, A., Kow, W.-L., Magrane, G., de Jong, P., Gray, J.W. and Collins, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3579 TIBATGITCIBICAGIBGITGIBCBICTICTIBCTCTCAGCBIBTCACCAIBTBGBIBIB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAIDATITIGITAATCIAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCTGGCAACCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTCCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACCCTTTACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATTTTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGATTCATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATAATITGITAATCTAATCACTGATGGATATGTAGGATATTTAAGTTTTTGACATTAT
                                                                                                                                                                                                                                                                                                                                                                                                        504 CTTATCTTTTATGCATATATATTTGAACATTTTACATTGTTTATATTTTTAATCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTACTCAAGTGTGTTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTGTCAAATGTATTCACCCATGTAGTCACCTTCTTATGAAGAGACAGAACACGTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTATCTTTATGCATATATATTTGAACATTTTACATTGTTTATATTTAATCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                TTACTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAA
                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                            504;
                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                        13.3%; Score 500.8; DB 2;
.larity 99.6%; Pred. No. 1.3e-60;
Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATAAAGTGGCTATAAATGAAAA 3722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATAAAGTGGCAATAAATGAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BZ600841.1 GI:31509303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BZ600841
                                                                                                                                                                                                                                                                                                                    Best Local Simi
Matches 502;
                                                                                                                                                                                                                                                                                                                                                                        3219
                                                                                                                                                                                                                                                                                                                                                                                                                                                    3279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BZ600841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

ω

```
TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGGACAATAATGTA-AAATGAAAATAAATTTCTAATCCCCCTGACTAACTGAATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         50; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tch
al Similarity 90.5%; Pred. No. 7.4e-61;
684; Conservative 0; Mismatches 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                    481 TAGCAGACTCTGGCGAAGTTGTTCAC 506
                                                                                                             BF240893.1 GI:11154817
                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .809
                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                           BF240893
                                                                                                                       501
           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                              RESULT 11
                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                BF240893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
                                         gg
                                                                                                               g
                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Primates, Catarrhini, Hominidae, Homo.

1 (Bases I to 527)

S NIH-MGC http://mgc.nci.nih.gov/.

L Onpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: Gapbs-remail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: CLONETECH Laboratories, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be http://image.llnl.gov

http://image.llnl.gov

Location/Qualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                              /dlone=IMAGE.4109064"
/tissue type="from acute myelogenous leukemia"
/lab host="bH10B from acute myelogenous leukemia"
/lab host="bH10B from acute myelogenous"
/lone lib="NHH MGC 55"
/note="Crgan: bone marrow; Vector: pDNR-LIB (Clontech);
Site=1: Sfil (ggocgacteggoc); Site=2: Sfil (ggocattatggoc); Double-stranded cDNA was prepared from cell line RNA, 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTAGAGGCGGGCGGCCATG-dT (30) BN-3' (where B = A, C, Or G and N = A, C, G, Or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGACTACATTTGAAAGAAAACTTCAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201 ACTICTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGGCTATGAGAACATT 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321 GACTCCCTCACAAGGAAAGTGAGACAGTTTAGAGAAAAGGTCAGAGAAAAATGCCCTT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTAGGACTTCTGTTAGTAGGCCTTGTTCCTGCACCATGAGTTATGAAGTTGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAACCGAGTCACTGTGAAAAGATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTICTAATCAGGAAAACGAGAATGGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCACATCCCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGATGAGAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 527;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.0%; Pred. No. 2.3e-61;
Matches 506; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                           1. .527
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                             Source
ORGANISM
                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
/mol type="mRNA"
// db xref="nRNA"
/ db xref="taxon:9606"
/ clone="IMAGE:4091963"
/ tlssue type="from acute myelogenous leukemia"
/ tlssue type="from acute myelogenous leukemia"
/ lab host="NHH NGC 55"
/ clone lib="NHH MGC 55"
/ note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
/ sire l: Sfil (ggccgcctcggcc); site 2: Sfil
/ ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5 and 3 adaptors were used in cloning as colours: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                      601875444F2 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091963 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3' adaptor sequence: 5'-ATTCTAGMGGCGAGGGGCGACATG-dT(30)BN-3' (where B = A, C, C, G, C, T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
480
                                  441 TTTCCACACTAAAATCCTCAAGCTGCTTTATCACCTTCCAGCAATGAAGACAATGCAGAA 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
Email: Gapbs-r@mail.nih.gov
Tissue Procurement: Arcc
cDNA Library Preparation: CLONETECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM948 row: h column: 12
High quality sequence stop: 651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 809)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CIGATAIGIGGCAICTCTGTGGCTTAGGTGAAATCATAGAAATTGACAATGACCTAAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          582 CTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACAAATGACCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                642 ATAITCIAIGIGITITIGCITGIAAAGITIGAGGACAIGGAGGIGAIAAAAAAAACITIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 809;
```

qq à a  $\dot{\delta}$ Q à qq ò qq ð 셤 ò 임

셤

심 ò

δ

g ઠે

δ

```
organism="Homo sapiens"
                           /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 98.7%;
Matches 538; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3731 AAAAA 3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF242113
BF242113.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAAA 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST
                                                                                                                                                                                                                                                                                                                                                                                                                                          549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Ph.D.
Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: M. Bento Soares, Ph.D.
cDNA Library Preparation: M. Bento Soares, Ph.D.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NNI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/Link, send email to:
info@image.llnl.gov
Seq primer: -40UP from Gibco
High quality sequence stop: 476.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF434786 549 bp mRNA linear EST 29-NOV-2000 7072f03.xl NCI_CGAP_Kidl1 Homo sapiens cDNA clone IMAGE:3641981 3',
                                   2870
                                                                                                                                                                                                                                                  3050
                                                                                                                                                                                                                                                                                                                       3110
                                                                                                                                                                                                                                                                                                                                                                                          3170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGCATATAAATATTTGAACATTTTACATTGTTTATATTTTAATCAGTTTTACTCAAG 3287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAA 3347
                                                                                                                                                                            CCTTATITIGIAATAAATITAATITIAATITIGAGTAACAATCIGGAATTATCAGAGAAGGG 2990
                                                                                                                                                                                                                                                                                                                                                                                                                             428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   488
                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                    308
                                                                    128
                                                                                                                                       GGAAAATGACAAATTTTTTACTTTTCGTCTGCCTTTGTAGCTATTTTATGATAAATA 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

(Dases 1 to 549)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index

Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAAGCAATAGGTTAATAAACAGTATTGATTGGTAGAAGGAACGTTGAAATCCAAGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                             369 AGTTTTTCAGCAAAGTAGAGTTTAAGAAATGTAACTATCTTATGTGGTTATGAAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGAATCATTGCTGTATAAGTGCTTTTTTAACCTGTAAATTGTTTTTGTGAAGCTTATCTTT
                                                       189 CCATATITGTAATAAGATTAATTTTAATTTTGAGTAACAATCTGGAATTATGAGAGGG
                                                                                                                                                                                                                                                                                249 GCAAGCAACAGGTIAATAAACAGTATTGAATTGTAGAAGGAACATTGAAATCCAAGAGCA
                                                                                                                                                                                                                                                                                                                                                      309 reagrererregeregerecaraagecacaagaarerraarerregagarer
                                                                                                                                                                                                                                                                                                                                                                                           3111 AGTITITCAGCAAAAGCAGGATTTAAGAAATGTAACTATCTTATGTGGGTTATGAAGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA---TTTTGTGAAGCTTATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      489 TATGCATATAAATATTTGAACATTCTACATTGTTTATATTCTTAATCAATTTTACTCAAG
                                                                                                       GGAAAATGACAAAATTTTTTTTTTTTCTTCTGCCTTTTGTAGCTGTTTTATGATAAATA
                                                                                                                                                                                                                                                                                                                       TCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGATGTCTTAATCTTTCCGAGATCT
GGATTCTTGTGCCCTCTTGTGGTGATTTACATGTGCGGAAGGGAAACAATAGAAATTTTG
                                   CAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTCCTGTAGATATTAGCCAATTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3348 ATGIATICACCCATGIAGICACCICCIT 3375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF434786.1 GI:11447074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BF434786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                           3051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3228
                                      2811
                                                                                                             2871
                                                                                                                                                                                 2931
                                                                                                                                                                                                                                                      2991
                                                                        69
                                                                                                                                                129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BF434786/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
```

```
/clone=TundaRS:3641981"
/lab_host="LundaRS:3641981"
/lab_host="DH108"
/clone=lib="MCI CGAP Kid11"
/note="Corgan: kidney; Vector: pT7T3D-Pac (Pharmacia) with
/note="Corgan: kidney; Vector: pT7T3D-Pac (Pharmacia) with
/note="Corgan: kidney; Vector: pT7T3D-Pac (Pharmacia) with
/note="Corgan: kidney; Vector: pT7T3D-Pac (CGAP Kid3 was
Plasmid DNA from the normalized library NCI CGAP Kid3 was
prepared, and ss circles were made in vitro. Following HAP
purification, this DNA was used as tracer in a subtractive
hybridization reaction. The driver was PCR-amplified cDNAs
from a pool of 5,000 clones made from the same library
(clonelDs 1322376-1323911, 1456007-1456775, and
1500552-1502855). Subtraction by Bento Soares and M.
Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF242113 527 bp mRNA linear EST 14-NOV-2000 601880401F1 NIH_MGC_55 Home sapiens cDNA clone IMAGE:4109064 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTATGAAGAGACAGAACACGTACATCCTCCCAGAAAGTTCCACAGAGGTGCTCCTTTTCC 3430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3611 IGTCTCAGCATATCACCATATAGATATACTATAATTTGTTAATCTAATCACTGATGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69 TGTAGGATATTTAAGTTTTTTGACATTATGAATAAAGTGGCTATAAATGAATAAAGCGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reference caracararagararacararas references and constructions and constructions and constructions are constructed as a construction of the constru
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACCACTGTAAGGGTAGAGTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recriateaagagacagaacacgracarccreccagaaagriccacagggcrecritice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGAGTTTCACCAGTCCTGGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9491 TATTICIAGCAAIGIACCCTITCCATATITATITITGIGIGIAAGGCTICTITIAGICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATAATATTTTTTGAGATTCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3191 TGCTTTTTAACCTGTAAATTTTGTGAAGCTTATCTTTTATGCATATAAATTTTGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rgcrittiaaccrgraartrigrgaagcriarcrittargcararaaararrigaacar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 533.8; DB 2;
Pred. No. 2.9e-65;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:11156040
```

```
Tulyyama, A., Hattori, M., Toyoda, A., Taylor, T.D., Yada, T.,
Totoki, Y., Matanabe, H. and Sakaki, Y.
Direct Submission

Direct Submission

Submitted (02-AUG-2001) Asao Fujiyama, The Institute of Physical
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
(E-mail:chimpbe@ggsc.riken.go.jp, WEL:http://hgp.gsc.riken.go.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)

Clones are derived from the chimpanzee BAC library RPCI-43 This BAC
end was generated during the R&D process and may have higher chance
                                                                                                            2314
                                                                                                                                                                                                       2374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANJEG2948 643 bp DNA linear GSS 09-JAN-2002
Pan troglodytes DNA, clone: RP43-055101.TJ, genomic survey
sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2810
                                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                  TCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAA 2434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ï
                                                                                                                                                    ccarcagaaagcagaagrercacrarrrcaagregegegegeaaaaagrrrcagargrraa 482
                                                          GTAATTTTATACAATATTTTATATTATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGA 422
                                                                                                                                                                                                                                                                                                                           543 TCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAA 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan troglodytes
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Pan.
                                                                                                                                                                                                                                GTAATTTTATACAATATTTTAAATTTTTATGCCTGAAACAGAGTTTGCGCACATTGGA
                                                                                                       CCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAA
                                                                                                                                                                                                    GCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2751 GAATTCTTATGCCCCTCTTGTGGTGATTTTAATGTGCGGAAGGGAAACAATAGAAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fujiyama, A., Hattori, M., Toyoda, A., Taylor, T.D., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y.
BAC end sequences of Library RPCI-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /sex="male"
/cell_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 15.2%; Score 570.4; DB 9; Best Local Similarity 95.4%; Pred. No. 2.1e-70; Matches 599; Conservative 0; Mismatches 26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Pan troglodytes"
                                                                                                                                                                                                                                                                                                                                                                                                  2435 TAATTAAAAATTAGCCAGGTGTGGTG 2461
                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTAANAAATTNAGCAGTGTGTGTG 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="genomic_DNA"
/db_xref="taxon:9598"
/clone="RP43-055101.TJ"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R.Site 1 : BCORI
R.Site 2 : FORT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       f clone tracking errors
PRIMERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AG182348.1 GI:16712028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished 2 (bases 1 to 643)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequencing: IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AG182348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIBRARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GSS
                                                                                                       2255
                                                                                                                                                                                                    2315
                                                                                                                                                                                                                                                  483
            2195
                                                          363
                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                  2375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
AG182348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                          q
                                                                                                                                        g
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                          à
                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Site 2: Sittl (ggoggateggate); Library is coligo-dry primed and directionally cloned. PBMC - Peripheral Blood Monounclear Cells. RNA was pooled from 3/6hour stimulation with PMA and lonomycin. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-ATTCTAGAGGCGACATG-dT(30) BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.69 kb (range 0.70-5.0 kb): 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1835 ATCTCTACCGAAGGTGGATGTGTAGTTTCTGGTTTTAAAATTCAAGGAAAACTGGAAAATA 1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1895 ATCCATCTAATTATGCTTTCTTTCCCAAGAAGTTTTTTAATGATATGCCAGCTTCCTAAT 1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2075 ATTTATTTTGGATTTTTGGAATATTTCCATACATATAATGAGAGAGTTGGAAAATGGGAT 2134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2135 TCAAGTCTAATCATAAAATTCACTTATGTTTGATATACACCTTATCTGAATAGCCTGAAG 2194
                                                                                                                                                                                                          National Cancer Institute / NIH
Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: capabbe-remail.nih.gov
Tissue Procurement: Narayan Bhat
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llnl.gov
Plate: NDCM210 row: n column: 16
High quality Sequence stop: 604.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arccarcraarrangcriticitateccaagaagririitaargarargccagcriccraar 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183 TATACGAGTTGAGTATCCCTTAGATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTCAG 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 ATTTATTTTTGGATTTTTGGAATATTTCCATACATATAATGAGAGTTGGAAAATGGGAT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303 TCAAGTCTAATCATAAAATTCACTTATGTTTGATATACACCTTATCTAGATAGCCTGAAG 362
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 728)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Arcrcraccaaagergargragrrcrggrrraaaarrcaagcaaacrggaaaara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATACGAGTTGAGTATCCCTTAGATGAGATGCTTGGGACCAGAAGTGTTTTGGATTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue type="Pooled"
/lab_host="DH10B (TI phage-resistant)"
/clone lib="NIH MGC 191"
/note="Vector: pDNR_LIB; Site_1: Sfil (ggccattatggcc);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 6; Length 728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 612.2; DB 6;
Pred. No. 2.8e-76;
0; Mismatches 10;
                                                                                                                                                                    Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="IMAGE:30414375"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 98.4%;
Matches 617; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bource
  ORGANISM
                                                                                                                 TITLE
JOURNAL
COMMENT
                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIGIN
```

g ò ద

ò

g ò 셤

ò

```
CD639433 17-JUN-2003
AGENCOURT 14532881 NIH MGC 191 Homo sapiens CDNA clone
IMAGE:30414375 5', mRNA sequence.
3208 AITHGIGAAGCHTARCTITAIGCARAAAATAITTGAACAITHACAIGTTAATI 3267
603 AITHGAAGCHAICTTHCIGCCAAAAATAITIGAACAITHACAIGGTTAATA 662
                                                                                                                                                                                                                                                                                                                                                                                           123 ACATTITGCCTCTCTATTCAACGAATTCTTATGCCCTCTTGTGGGTGATTTTAATGTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGAAACAATAGAAATTTTGCAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                         183 AAGGGAAGCAATAGAAATTTTGCAATTCTAGAAAAGTCATTCTGTCAAAATATGTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243 CIGIAGAIALTAGCCAATTTTAGGAAAATGACAAAATTTTTTACTTTTCGTCTGCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCTGTTTTATGATATAAATACCTTATTTGTAATAAAATTAAATTTTAATTTGAGTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3029 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  423 GGAACGTIGAAATCCAAGAGCATCAATGTCTTCIGGTGGTICACCATAAGCCACAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483 TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCCAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTATGTGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTT-TAACCTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543 CTTATGTGGCTATGAAGAACAATAGAATCCTTGCTGGATAAGTGCTTTTCTACCCTGGAA
                                                                                                                                                                                                                                                                                              2669 TITAGICATIGACAAGCAITAATCAATAGGIGGACTCCAGATAACTCATTIGCIGIATAAC
                                                                                                                                                                                                                                                                                                                       2729 ACAITITGCCTCTGTATCAACGAATTCTTATGCCTCTTGTGGTGATTTTAATGTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTAGATATTAGCCAATTTTAGGAAAATGACAAAATTTTTTTACTTTTCGTCTGCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GITICAGAITITIGGAGCAITITCAGAICTICAGAITTAGGGGAITITICAACCIGTACTGACCT
                                                                                                                                                                                                                                       2609 GITICAGAITITIGGAGCAITITCAGAICTICAGAITAGGGAITITICAACCIGTACTGACCI
                                                                                                                                                                         Length 786;
                                                                                                                                                                                                        Indels
                                                                                                                                                                       16.7%; Score 628.6; DB 5; 97.7%; Pred. No. 1.4e-78; tive 0; Mismatches 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CD639433
CD639433.1 GI:31806240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens (human)
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST.
Homo
                                                                                                                                                                                                           Matches 648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3268
                                                                                                                                                                                                                                                                                                                                                                                                                                 2789
                                                                                                                                                                            Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
CD639433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BUI55429
AGENCOURT 7979368 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:61083385', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                       1180
                                                                                                                                                                                                                                                                         TGACTICTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCAATTGCCAATCAGACAAC 1120
                                                                                                                                                 941 AACCIGACICIGGIGIAGAICACACACIGICIGAGGGAIICCCAICIAIGAGACIIIIGICI 1000
                                                                                                                                                                                                             ACATAACAGAGACCTTGGTTTCCACAACCCCTTTATTTTAGCTAAAGCATTCTTTTTAG 1060
                                                                                                                                                                              482
                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue type="from acute myelogenous leukemia"
/lab_host="DH10B (T1 phage-resistant)"
/clone lib="NIH MGC 55"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site 1: Sfil (ggccgcctcggcc); Site 2: Sfil
(ggccattatggcc); Double-stranded cDNA was prepared from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          603 TITGAALCTACCTAIGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                  GAACC----GATGTGCACTTTCCATTTAATGATTTAT-GTCTTTGCTTGTAA--CTCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                  663 GAACCCGATGTGCCCTTTTCCCATTTAATGATTTATGGCCTTTGCTAAACTCCTGGC
                                                                                                     TTTGAATCTACCTATGACCTGTAAGCTCTCCTGCTTCAAGATCTTGCCTCTTTAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ğ
                                       1 (bases 1 to 786)
NIH-MC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Enall: cgapbs r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1235 CTCCCTAAATGTATAAA 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                723 TCCCCTAAAATGTATAAAA 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BU155429.1 GI:22668961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                     363
                                                                                                                                                                                 423
                                                                                                                                                                                                                1001
                                                                                                                                                                                                                                                                                                          543
                                                                                                                                                                                                                                                                                                                                                                                                     1181
                                                                                                                                                                                                                                                                            1061
                                                                                                                                                                                                                                                                                                                                       1121
                                                       303
                                                                                      881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 φ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BU155429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
```

362

2908

302

2788

2728

g

g

ð

g ò g ò

8

qq ð 임 ò 임

à

122

2668

62

ä

Gaps

1;

2848

182

242

3028

3088

482

422

3148

542

3207

```
bp mRNA linear EST 03-SEP-2002
Homo sapiens cDNA clone IMAGE:6107719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 TCTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAATGACCTAA 122
                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Laboratorium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2350 row: n column: 08
High quality sequence stop: 512.
                                                                                                                                                                                                                               1 (Dasses 1 to 741)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    521 GAAACATTCCTTTCTGGCTAAAGTTTAGAAATATTATCTTATTATATATCCTTAGGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTAGGACAATAATGTAAAATGAAAATATTCTAAATCCCCCTGACTAACTGAATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCTTCTAGGCCAAAGAGCCTCAGATGAACCTGAAAGACTGAATTCTGGCCATGATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGATATGTGGCATCTCTGTGGCTTAGGTGAAATCATAGAAATTGACACAAATGACCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123 AATATTCTATGTTTTTTGTTGTAAAGTTTGAGGACATGGAGGTGATAAAAAAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITAGGACAATAATGTAAAATGAAAATTAAATTTCTAATCCCCCTGACTAACTGAATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCTTCTAGGCCAAAGAGACCTCAGATGAACCTGAAAAGACTGAATTCTGGCCATGATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17.9%; Score 673; DB 5; Le 97.2%; Pred. No. 8.4e-85; ive 0; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .741
/organism="Homo sapiens"
                                               741 1
AGENCOURT 7951175 NIH_MGC_55 I
5', mRNA Sequence.
                                                                                                                       BU155309.1 GI:22668841
                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 718; Conserva
                                                                                                                                                                                  Homo sapiens
                                                                                                                                             EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243
                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Source
                                                                  DEFINITION
                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
           RESULT 5
BU155309
LOCUS
                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                           3. adaptor sequence:
5.-ATTCTAGAGGCGAGGCGGCGACATG-GT(30)BN-3' (where B = A,
6. or G and N = A, C, G, or T). Average insert size
1.65 kb (range 0.9-4.0 kb). 14/15 colonies contained
inserts by PCR. This library was enriched for full-length
clones and was constructed by Clontech Laboratories (Palo
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_55"
/note="Organ: bone marrow, Vector: pDNN-LIB (Clontech);
Site [ (ggccgcctcggcc); Site_2: Sfil (ggccgctcggcc); Site_2: Sfil (ggccattatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and
                                                                                                                                                                                                                                                                                                                                                 ب
ب
                                                                                                                                                                                                                                                                                                                                                                           2055 AGAAGIGITTIGGATTICAGATTTATTTTTGGATTTTGGAATATTTCCATACATATAATG 2114
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2115 AGAGAGTIGGAAAATGGGATTCAAGTCTAATCATAAAATTCACTTATGTTTGATATACAC 2174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTTATGCCTGAAA 2234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2235 CAGAGTITGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCT 2294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2295 CAAAAAGITICAGAIGTIAAGCIGGIGAIGCAGTICAIGCCAGIGAICCGAGIACTIIGG 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAG 2414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTC 2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63 AGAGAGITIGAAAATGGGATTCAAGTCTAATCATAAATTCACTTATGTTTGATATACAC 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123 CTTATCTGAATAGCCTGAAGGTAATTTTATACAATATTTTAAATAATTTTATGCCTGAAA 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGCTGGTGCACCCCTGTA 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     662
                                                                                                                                                                                                                                                                                                                                                                                                    722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183 CAGAGTITGCGCACATTGGACCATCAGAAAGCAGAAGTGTCACTATTTCAAGTCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGCACACCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCCCAGGTACTCAGGAGGCTGAGGTAGTAGTTGTTTGAGACTGGGAGGTTGAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2595 AAAAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTTCAGATCTTCAGATTAGGGATTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAAAAAAATTTCAGATTTTGGAGCATTTCAGATCTTCAGATTAGGGATTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCTGTACTGACCTTTTAGTCATTGACAAGCATTAATCAATAGGTGGACTCCAGATAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATTIGCIGIATACACA-TITIGCCTCTCIAITCAACAAIICII--AIGCCCTCTIGIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              663 CATTIGCTGTATACACATTITIGCCTCTCTATTCAACGAATTCNTATGCCCCTCTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                               . 9
                                                                                                                                                                                                                                                                                                        DB 5; Length 785;
                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGATTTTAA---TGTGCGGAAGGGAAACAATAGAAATTTT 2809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       723 GTGATTTTTATTGTGGCGGAAAGGGAAACCATAAGAAATTT 763
                                                                                                                                                                                                                                                                                                                                            17;
                                                                                                                                                                                                                                                                                                    18.4%; Score 692.4; DB 5.1arity 97.0%; Pred. No. 1.6e-87; Conservative 0; Mismatches 17
                                                                                                                                                                                                                              clones and walto, CA)."
                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                        738;
                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                             ORIGIN
```

þe

g ò g à qq à g ò qq 9 6  $\delta$ qq 580

Gaps

q  $\delta$ 

8 8

ð Db g à g ò

ð

62

640

700 182 760 242 820

a

g à

ò

g

ò

```
BU171872 7952397 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:6108004 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1403 ATAIGICCAAGAAICTICAATICCAAGCCIGCICACCAAAITICAAAIGCCAACAICICC 1462
                                                                                                                                                                         TAAAGCATTCTTTTCTACTGACTTCTTAAGTCTTTAGACAAAGCTTAACTCTTTCAACCA 1102
                                                                                                                                                                                                                                                                                        ATTGCCAATCAGACAAACTTTGAATCTACCTATGACCTGTAAGCTCTCCTGCTTCAAG 1162
126 AATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tissue Procurement: ALC.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratorium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLCM2351 row: j column: 05

High quality sequence stop: 550.

Location/Qualifiers

1. 785

/ organism="Homo sapiens"

//mol.type="mcNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   606 ATATGICCAAGAATCITCAATTICCAAGCCIGCICACCAAATTICAAATGCCAACAICTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1283 ACTITCTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGCTCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  486 ACTITICTCAGGACCTCCTGAGAGTGTATCCCAGGCCATGGTAAGTCATGTTGGTAGGTCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1343 TCAACCTCTTTAAATATTTTACAGAATTTGGGTTTTGGTTACCAATAAGTCTCCACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          546 rchaccititraantaritracagaaritiggerritggriaccaaraagrcticacaaar
                                                                                                                                                                                                          246 TAAAGCATTCTTTCTACTGACTTCTTAAGTCTTTAGACAAGCTTAACTCTTTCAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            426 TGTAACTCCTGTCTCCCTAAAATGTATAAAGTAAAGGTGACCTGACCACCCCACAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (base; 1.0.785) NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTAACTCCTGTCTCCCTAAAATGTAAAAGTAAACGGTGACCTGACCACCTCAGGCAC
                                                                                       186 AICTAIGAGACTTIGICTACAIAACAGAGACCTIGGITICCACAACCCCTTTAITTIAGC
                                                                                                                                                                                                                                                                                                                                ATCTTGCCTCTTTAAGCTGAACCGATGTGCACTTTCCATTTAATGATTTATGTCTTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                            366 AICTIGCCICITIAAGCIGAACGAIGIGCACITICCALITAAIGAITIAIGLITIGCI
                                                               983 ATCTATGAGACTITGTCTACATAACAGAGACCTTGGTTTCCACACCCCTTTATTTTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATCCAATTACCTATTTCATCTTTGAGGTGTAATCTAC 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATCCAATTACCTATTTCATCTTTGAGGTGTAATCTAC 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BU171872.1 GI:22685856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5', MKNA
BU171872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1223
                                                                                                                                                                                        1043
                                                                                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                                                                                                                                                                          1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BU171872
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                           g
                                                                                                                                                                                     à
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                       ð
                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

The seas 1 to 704)

Sao,S., Adams,M.D., Nierman,W., Malek,J., Shizuya,H., Simon,M. and Venter,J.C.

Use of BAC End Sequences from CalTech Libraries for Sequence-Ready Map Building

L. Other GSSs: CITBT-E1-2548B21.TR

Contact: Shaying Zhao, William Nierman, Mark Adams

Department of Eukaryotic Genomics

The Institute for Genomic Research

9712 Madical Center Dr., Rockville, MD 20850

Tel: 301 838 0200

Fax: 301 838 0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AQ390121 704 bp DNA linear GSS 06-MAR-1999
CITBI-E1-2548B21.TF CITBI-E1 Homo sapiens genomic clone 2548B21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66 GAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGC 125
                                                                                                                                                                                              Email: hboetigr.org
Clones are available from Research Genetics (info@resgen.com). BAC
end search page:
http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Seq primer: Misr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 862
                                                                           TATAGATATACTATAATTTGTTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTT 3688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                    722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /cell_type="sperm"
/clone_lib="CITBI-B1"
/note="Vector: pBeloBAC11; Site_1: EcoR1; Site_2: EcoR1;
CalTech Human BAC Library D"
               543 ICAICIAIGITIAAIGITCIAICAGIAGIIGIACAICITACTIGICICAGGAIAICACCA 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              863 GAGTTTATGCACAAGTGACCAGGATGAGTCATAAGACTGATGAAATAGACTGATTGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATAAGAGTCCCAATTCCAACCTGACTCTGGTGTAGATCACACACTGTCTGAGGGATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 803 GAATTCTGGCCATGATAGGAAGGGAGGTGAGACACACCTTGTTATACCCCTTTCCCTTTTG
                                                                                                                                                                                                                                  TATAGATATACTATAATTTTGGTAATCTAATCACTGATGGATATGTAGGATATTTAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18.5%; Score 694.2; DB 8;
99.6%; Pred. No. 9.1e-88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .704
/organism="Homo Bapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="2548B21"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genomic survey sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AQ390121
AQ390121.1 GI:4361144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.67
Matches 696; Conservative
                                                                                                                                                                                                                                                                                                                   3749 AAAAAAAAAA 3759
                                                                                                                                                                                                                                                                                                                                                                          723 AGCGGGGAAAA 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      923
                                                                                                                                          603
                                                                                                                                                                                                    3689
                                                                                    3629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AQ390121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

a à 셤

ð

1402

605

665

1222

425

365

305

245

1282

485

N

ò d ò g  $\dot{\delta}$ В ð οp g 4

S S

à qq ò Db ò Ωp ò qq

ò

g ò

```
/organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_txef="taxon:9606"
/clone="taxon:9606"
/clone="Daylos II phage-resistant)"
/clone="Daylos II phage-resistant)"
/clone lib="NIH MGC 82"
/clone lib="NIH MGC 82"
/note="Organ: testis; Vector: pDNR-LIB (Clontech); Site I: Sfil (ggccgccccggcc); Sie 2: Sfil (ggccattatggcc); S' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC3' and 3' adaptor sequence: 5'-CACGGCCATTATGGCC3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGACATGATGGT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size I:35 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3269 TIAATCAGTTTTACTCAAGTGTGATTATACAAGAAAATGTAACCACTGTAAGGGTAGA 3328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA 3388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3509 CTTTCCATATTTATTTTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGAT 3568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3569 TCATCIATGTTAATGTTCTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACCA 3628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITATGTGGGGTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      423 GGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
         Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tisaue Procurement: CLONTECH
CDNA Library Preparation: CLONTECH
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratorium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llnl.gov
Plate: LLCM2334 row: h column: 12
High quality sequence stop: 561.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3029 GGAACGITGAAAICCAAGAGCAICAAIGICTICIGGIGGIICACCAIAAGCCACAGCAGA
                                                                                                                                                þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rGrcrrantcrrrccgagarcragrrrrcagcaaagcaggarrraagaaargraacrar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTATGTGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCCTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITIGIGAAGCITATCTITTATGCATATAATATTTGAACATTTTACATTGTTATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITIGIGAAGCTTAICTITIAIGCAIAIAAATAITIGAACAITTIACAITGIAILI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         243 ITAATCAGITTTACTCAAGIGTGTGATTATATACAAGAAAATGTAACGACTGTAAGGGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303 GITATAAGAATITIGICAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3389 ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               363 ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTCCCTGAGTTTCACCACTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCATATTTATTTTGTGTGTAAGGCTTCTTTTAGTCATTATAATATTTTTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 695.8; DB 9
Pred. No. 5.3e-88;
0; Mismatches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18.5%;
ilarity 97.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 709; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                        FEATURES
           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                             3268
                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                        TTAATCAGTTTTACTCAAGTGTGATTATATACAAGAAAATGTAACCACTGTAAGGGTAGA 3328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTATAAGAATTTTGTCAAATGTATTCACCCATGTAGTCACCTCCTTATGAAGAGACAGA 3388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACACGTACATCCTCCCAGAAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCT 3448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCAACCAATGATCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC 3508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTITCCATAITTAITTIGIGIGIGTAAGGCTICTITTAGTCATTATAATATTTTTGAGAT 3568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATAGATATACTATAATTTGTTAATCTAATGATGGATATGTAGGATATTTAAGTTT 3688
                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                          bp mRNA linear EST 24-MAY-2002
Homo sapiens cDNA clone IMAGE:6101435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      303 GITATAAGAATTITGICAAAATGIATTCACCCCATGIAGGCACCCTCCTTATGAAGAGAGACAGA 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTACTTGTCTCAGGATATCACCA 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGACATTATGAATANAGTGGCTATAAATGAATAAAGCGACTACAAATTTGAAANNNNN 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                         TGTCTTAATCTTTCCGAGATCTAGTTTTTCAGCAAAGCAGGATTTAAGAAATGTAACTAT
                                                                                                                                                                                                                                                                                          CITATGLGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                          TTTTGTGAGCTTATCTTTTATGCATATAAATATTTGGACATTTTACATTGTTTATATT
                                                                                       3029 GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGCAGA
                                                                                                                              GGAACGTTGAAATCCAAGAGCATCAATGTCTTCTGGTGGTTCACCATAAGCCACAGAGA
                                                                                                                                                                                                                                                            CTTATGTGGGTTATGAAGAACAATAGAATCATTGCTGTATAAGTGCTTTTTAACCTGTAAA
                                                                                                                                                                                                                                                                                                                                                      TTTTGTGAAGCTTATCTTTTATGCATATAAATATTTGAACATTTTACATTGTTATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTTCCATATTTATTTTTGTGTGTAAGGCTTCTTTTAGTCATTATATATTTTTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACACGTACATCCTCCCAGAAGTTCCACAGTGCTCCTTTTCCCTGAGTTTCACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAACCAATGATCTGCTTCGTATAATTATAACTGTTCTAGATATTTGTAGCAATGTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCATCTATGTTTAATGTTCTATCAGTAGTTGTACATCTTACTTGTCTCAGCATATCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Buccieosco
1 (bases 1 to 782)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                  .
0
         Length 749;
                                                Indels
  Score 696.8; DB 5;
Pred. No. 3.9e-88;
0; Mismatches 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DQ441475
AGENCOURT 7838612 NIH_MGC_82
5/, mRNA Sequence.
BQ444475.1 GI:21180551
Query Match
Best Local Similarity 96.3%;
Matches 704; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3749 AAAAAAAAAA 3759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723 NNNNNNANNANA 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                            3089
                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                 3149
                                                                                                                                                                                                                                                                                                                                                   3209
                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                           3269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
BQ441475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
```

```
RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BUB52381 AGENCOURT
BQ441475 AGENCOURT
AQ190121 CITE1-E1-
BU111872 AGENCOURT
BU155309 AGENCOURT
BU155429 AGENCOURT
CD639433 AGENCOURT
AG182348 Pan trog1
BF42113 60186401
BF242113 60186401
BF24183 601875444
AW655849 hi94f08.x
BEC00841 WHAAJ89TR
BF24113 601877334
A1766257 wh68904.x
BG461807 RST44735
AQ447547 ZW81D09.s
AQ14145 H9 5384_B
BS965 CIT-HSP-2
AQ74145 H9 5384_B
BS965 CIT-HSP-343
BM925124 AGENCOURT
AQ106243 CIT-HSP-34
BB1885 RPCT11-17P6
                                                          November 18, 2004, 13:34:28; Search time 10878 Seconds (without alignments) 12602.158 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                   Description
                                                                                                                                                                                         65645750
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                     32822875 seqs, 18219865908 residues
                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                              summaries
                                         - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AQ109243
B81885
CD704731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AW665849
BZ600841
BF243193
AI766257
BG461807
AA447527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BU171872
BU155309
BU155429
CD639433
AG182348
BF434786
BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BQ441475
AQ390121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AQ743145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU852381
                                                                                                                                          IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                            Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                          gb_est1::
gb_htc::
gb_htc::
gb_est4::
gb_est4::
gb_est6::
gb_est6::
gb_gss1::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           439
1045
437
475
611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                  EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   940944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         232.4
226
221.8
198
196.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         506
502
502
500.8
489.6
4410.8
328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   696.8
694.2
692.4
692.4
673
673
673
673
8528.6
                                                                                                    Title:
Perfect score:
                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
                                          OM nucleic
                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                       Searched:
                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
No.
                                                              Run on:
```

20 4 4 4 4 4 5 5 5 5 5 6 5 6 5 6 5 6 5 6 5	195.0 194.4 194.4 194.4 194.4 195.1 192.4 191.6 191.6 191.6 191.6 191.7 191.7 191.7 191.7 191.7
--	--

## ALIGNMENTS

BUB52381 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE AUTHORS TITLE JOURNAL COMMENT FEATURES SOURCE	ACENCOURT 10402421 NIH MGC_82 Homo sapiens CDNA clone IMAGE:6617922 5. mRNA Sequence. BUBS2381 BUBS2381. GI:24037344 EST. Homo sapiens (human) MAMMALIA: Extraction (homo: homo:
	sequence: 5 - LANCOCCALATION CONTROL OF A STITUTAGEGGCGCGACATG-dT (30) BN.3 (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.35 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto CA) "
****	ALCO, CA/

Page Blank (uspto)

```
completed: November 18, 2004, 21:31:25
ne : 291 secs
                                                                           2556
                                                                                                                                                         Search col
Job time
                                         qq
                                                                           \delta
                                                                                                      qq
                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2376 CTIGAGCCCAGGAGITIGAGGCCAGACTGCACACACACAGTGAGACCTCGITICTACAAAI 2435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1736 CTTGAGGTCAGGAGTTGGAGACCAGCCTGGCCAACATAGTGAAACCCCGTCTCTACTAAA 1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1796 AATGCAAAAATTAGCCAGGCGTAGTGGTGGCGCACCTGTAGTCTCAGATACTTGGGAGGCT 1855
                                                                     2316 CTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1676 CAGGCGCGGTGGCTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGTAGGCAGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2436 AATTAAAAATTAGCCAGGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                              GAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGACCCTGTCT
                                                                                                                                                                                                            Sequence 1, Application US/08429742
; Sequence 1, Application US/08429742
; Patent No. 5686257
; GENERAL INFORMATION:
APPLICANT: Bazan, J. Fernando
APPLICANT: Bazan, J. Fernando
APPLICANT: Bazan, J. Fernando
APPLICANT: Albert
TITLE OF INVENTION: PURIFIED MAMMALIAN T CELL ANTIGENS AND
TITLE OF INVENTION: RELATED REAGENTS
NUMBER OF SEQUENCES:
ADDRESSEE: DNAX Research Institute
GRESPONDENCE ADDRESS:
ADDRESSEE: 1901 California Avenue
CITY: Palo Alto
STATE: California
COUNTY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

4.9%; Score 183.8; DB 1; Length 2477;
Best Local Similarity 77.0%; Pred. No. 5.4e-28;
Matches 224; Conservative 0; Mismatches 67; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         30031 CAAAAAAAAAAAAAATTAATGTGGAACTATTT 30066
                                                                                                              CAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTT 2629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 415-496-1200
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2477 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       415-496-1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
38..1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , NAME/KEY:
; LOCATION:
US-08-429-742-1
                                                                                                                                                                                                RESULT 15
US-08-429-742-1
                                                                                                                   2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                  g
                                                                                                                   ò
                                                                                                                                                 g
                                                        8
```

```
1856 GAGGGTGGAGAATCGCTTGAACCTGGGAGGTGGAGATTGCAGTGAGTCAAGATCTCACCA 1915
2496 GAGGTAGTAGGATTGTTTGAGACTGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCA
```

```
29851 Greanaccccarcritacrananarachanarinaccanderrecterrecterrecter 29910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2354 GGAAGCCAAGACAGGTGGATCTTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACA 2413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2474 AGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGGAGGTTGAGGCT 2533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2414 GTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCACACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 246240;
                                                                                                                                                                                                                                                           APPLICANT: Lauer, Peter M.
APPLICANT: Ruddy, David A.
APPLICANT: Ruddy, David A.
APPLICANT: Thomas, Winston
APPLICANT: Tsuchihashi, Zenta
APPLICANT: Wolff, Roger K.
TITLE OF INVENTION: Megabase Transcript Map: No. 5872237e1
TITLE OF INVENTION: Sequences and Antibodies Thereto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95; Indels
                                                30031 CAAAAAAAAAAAAATTAATATGTAGAACTATTT 30066
       2594 CAAAAAAAAAAAAGTITCAGATITIGGAGCATIT 2629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/724,394A FILING DATE: 01-OCT-1996 CLASSIFICATION: 536 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.9%; Score 184; DB 2; 71.7%; Pred. No. 1.6e-27; tive 0; Mismatches 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW STREET: Two Embarcadero Center, 8th Floor CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: misc_feature
; LOCATION: 1..246240
; OTHER INFORMATION: /note= "HLA-H.CONTIG"
US-08-724-394A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REFERENCE/DOCKET NUMBER: 017957-000100
TELECOMUNICATION:
TELEPHONE: 415-576-0200
                                                                                                                                                               ; Sequence 22, Application US/08724394A
; Patent No. 5872237
; GENERAL INFORMATION;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                APPLICANT: Feder, John N. APPLICANT: Kronmal, Gregory S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 415-576-0300
INFORMATION FOR SEQ ID NO: 22:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 246240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 71.7'
Matches 241; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                       JS-08-724-394A-22
                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                         g
       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29731 TAAAAAAAAAAAAACTACGGGGGGGGGGGCTCACGCCTGTAGTCCCAGCATTTTG 29790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29791 GGAGGCTAAGGCAGGTGGATCACTTGAGGTCAGGAGTTTGAGACCAGGCTGGTCAACATG 29850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29911 AATCCCAGCTACTCGGGAGGCTGAGTCAGGAGAATCACTTGAACCCAGGAGGCAGAGGTT 29970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29971 GCAATGAGCCAAGATCATGTCACTGTACTCCAGCCTGACAGAATGAGACTCAACTT 30030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG 2353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2534 GAACTGAGCCAGGATCTTGCCACCACTTCCAGCTTGGGCAACAGAGTGAGACCTGTCT 2593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2354 GGAAGCCAAGACAGGTGGATCTTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2474 AGICCCAGGIACICAGGAGGCIGAGGIAGIAGGAITGITIGAGACIGGGAGGIIGAGGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2414 GTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 184; DB 2; Length 246240;
Pred. No. 1.6e-27;
0; Mismatches 95; Indels 0;
                                                                                                                                                                                                                       TITLE OF INVENTION: Megabase Transcript Map: No. 5872237e1
TITLE OF INVENTION: Sequences and Antibodies Thereto
CORRESPONDENCE: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: TWO MEDATCAGETO Center, 8th Floor
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95; Indels
                                                                                                                                                                                                                                                                                                                                                                                                            CCUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC COMPALIDLE
OPERATING SYSTEM: PC-DGS/MS-DGS
SOFTWARE: PATENTIN PATA:
OVERLING SYSTEM: DOCT-1996
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/724,394A
FILING DATE: 01-OCT-1996
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REFERENCE/DOCKET NUMBER: 017957-000100
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-576-0300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
'PMNTH': 246240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LOCATION: 1..246240
; OTHER INFORMATION: /note= "HLA-H.CONTIG"
US-08-724-394A-21
21, Application US/08724394A
                                                                                    Kronmal, Gregory S.
Lauer, Peter M.
Ruddy, David A.
                                                                                                                                                     Thomas, Winston
Tsuchihashi, Zenta
Wolff, Roger K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 246240 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 71.7%;
Matches 241; Conservative (
                                                                   Feder, John N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
LOCATION: 1..246240
                Patent No. 5872237
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: no
MOLECULE TYPE:
                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

Gaps

.; 0

```
29911 AATCCCAGCTACTCGGGAGGCTGAGTCAGGAGAATCACTTGAACCCAGGAGGCAGAGGTT 29970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2534 GAACTGAGCCAGGATCTTGCCACCATTCCAGCTTGGGCAACAGAGTGAGACCTGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2414 GTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGGTGCACACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2474 AGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2294 TCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTG
APPLICANT: Thomas, Winston
APPLICANT: Tsuchihashi, Zenta
APPLICANT: Wolff, Roger K.
TITLE OF INVENTION: Megabase Transcript Map: No. 5872237e1
TITLE OF INVENTION: Megabase and Antibodies Thereto
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSTONT
STEPFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

4.9%; Score 184; DB 2; Length 246240;
Best Local Similarity 71.7%; Pred. No. 1.6e-27;
Matches 241; Conservative 0; Mismatches 95; Indels 0;
                                                                                                                                                                                                                                                                                                                                        COUNTRY:

COUNTRY:

21P: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM FC Compatible

OPERATING SYSTEM: PC-DOS/NS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

FILING DATE: 01-OCT 1996

CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caaaaaaaaaaaaaarraarararacaacrarrr 30066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAAAAAAAAAAAGTTTCAGATTTTGGAGCATTT 2629
                                                                                                                                                                                                                            ADDRESSEE: TOWNSEND and TOWNSEND and CREW STREET: Two Embarcadero Center, 8th Floor CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature;
| LOADION: 1..246240
| CHER INFRMATION: /note= "HLA-H.CONTIG"
US-08-724-394A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35,136
FR: 017957-000100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Fitte. Renee A.
REGISTRATION NUMBER: 35.136
REFERENCE/DOCKET NUMBER: 017;
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-576-0200
TELEPRAX: 415-576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 246240 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 20: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-724-394A-21
                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30031
                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16698 GGTGGCGTGCTCTTTAGCTACTTTGGGAGGCTGAGGTGGGGAGGACTGCTTGAGC 16639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16638 CCAGGAGGTCAAGGCTGCAGTGAGCTGTTTGCACCACTGTACTCCAGTCTGGGCAACA 16579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2458 GGTGGTGCACCCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2518 CTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACGATTCCAGCTTGGGGAACA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16818 AATCCCAGCACTTTGGGAGGCCAAGTGGGGGAGATCGTTTGAGCTCAAGAGTTCAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16878 TGTCATGCTGGTGTGCAAAAGGTTTCAGATTTTGGGCCAGGTGCAGTAGTTCATGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2280 TITCAAGICAGIGCICAAAAAGIITICAGAIGIIAAA-CIGGIGAIGCAGIICAIGCCAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2339 GATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTTGAGCCCCAGGAGTTTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAA-TTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
4.9%; Score 184; DB 1; Length 26764;
Best Local Similarity 74.7%; Pred. No. 9.2e-28;
Matches 257; Conservative 0; Mismatches 85; Indels 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16578 GAGCAAGACCCCATCTCAGAAAAAAAAAAAAAGTTTCAGATTTTG 16535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2578 GAGTGAGACCCTGTCTCAAAAAAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                                                          COMPUTER TREADBALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPPEATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/370,975B
FILING DATE: 10-JAN-1995
CLASSIFICATION: 435
                                                                                                                     ADDRESSEE: Nixon, Hargrave, Devans & STREET: Clinton Square, P.O. Box 1051 CITY: Rochester STATE: New York COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20894/80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20, Application US/08724394A
Patent No. 5872237
GENERAL INFORMATION:
APPLICANT: Feder, John N.
APPLICANT: Kronmal, Gregory S.
APPLICANT: Lauer, Peter M.
APPLICANT: Ruddy, David A.
                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
ATORNEY/AGENT INFORMATION:
NAME: Tinian, Susan J.
REGISTRATION NUMBER: 34,103
REFERENCE/DOCKET NUMBER: 2089;
TELEPHONE: (716)263-1636
TELEPHONE: (716)263-1630
INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
LENGINE CHARACTERISTICS:
LENGINE CHARACTERISTICS:
LENGINE CHARACTERISTICS:
LENGINE CHARACTERISTICS:
LENGINE CHARACTERISTICS:
TYPE: MUCLEIC acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: DNA (genomic)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 4435
                                                                                    NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon, Ha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                              14603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-724-394A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-370-975B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

ω

```
RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14773 caddiacadradachchranachchanachannachadachadanadaradhan 14714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14713 TTTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAA 14654
                                                                                                                GTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACAT 2561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2496 GAGGIAGIAGGAITGITTGAGACTGGGAGGITGAGGCTGAACTGAGCCAGGAICTTGCCA 2555
                                                                          203 AAATTAGCTGGGCATGGTGGTGGGGCCTGTAATCCCAGTTACTTGGGAGGCTAAGGTA 262
                                                                                                                                               263 GCAGAATTACTTGAATCTGGGAGGGAGAGGTTGCAGTGAGCCAAGATTGCGCCACTGCAC 322
143 GTCAGGAGTTCAAGAACAACCTCGCCAACATGGTGAAAACCCCCATCTCTACTAAAAATACA 202
                                                                                                                                                                                           2442 AAAATTAGCCAGGTGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2316 CTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2376 CITGAGCCCAGGAGITTGAGGCCAGACTGCACACACAGTGAGACCTCGITTCTACAAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATTAAAAAATTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14653 AATACAAAATTATGCAGGTGTGGGGCATGCCTGTAGTCCCAGCTACTCTAGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14593 dAGGCAGGAGAATAGCTTGAGCCTGGGATGCGGAGGTTGCGGTGAGCCGAGATCACGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14533 CTGCACTCCAGTCTGGGTGAGAGTGTGAGACCTGTCTCAAAACTAAACTAAA 14481
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: WEI, Ming-Hui et al TITLE OF INVENTION: ISOLATED HUMAN PHOSPHODIESTERASE TITLE OF INVENTION: ISOLATED HUMAN PHOSPHODIESTERASE ENCODING HUMAN TITLE OF INVENTION: PROSPHODIESTERASE PROTEINS, AND USES THEREOF FILE REFERENCE: CLOO1063
CURRENT APPLICATION NUMBER: US/09/754,250
CURRENT FILING DATE: 2001-01-05
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 111282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.9%; Score 184.2; DB 3; Length 76.8%; Pred. No. 1.2e-27; Live 0; Mismatches 68; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
US-08-370-975B-6/c
; Sequence 6, Application US/08370975B
; Patent No. 5622851
; GENERAL INFORMATION:
; APPLICANT: Maley, Frank
; APPLICANT: Maley, Gladys F.
; APPLICANT: Weiner, Karen X.B.
; TITLE OF INVENTION: Human Deoxycy
                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09754250 Patent No. 6376225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature

LCCATION: (1)...(111282)

OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 76.8
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 111282
                                                                                                                                                                                                                                                                                 RESULT 9
US-09-754-250-3/c
                                                                                                                2502
                                                                                                                                                                                           2562
                                                                                                                                                                                                                              323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                     ò
                                                                        g
                                                                                                              ò
                                                                                                                                             g
                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

Human Deoxycytidylate Deaminase Gene

```
14856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14735 GGTGGCGTGCACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGTGGGAGGACTGCTTGAGC 14676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14675 CCAGGAGGICAAGGCIGCAGIGAGCIGIGITIGCACCACTACICCAGICCIGGGCAACA 14616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2518 CTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACA 2577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14795 AGCTTAGGCAACATAGTGACAGCTCATCTCTACTGAAAATAAAAAACTTAGCCAGGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2280 ITTCAAGICAGGCTCAAAAAGTTICAGAIGTIAAG-CIGGIGAIGCAGTTCAIGCCAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14915 IGICATGCTGGTGTGCAAAAGGTTTCAGATTTTGGGCCAGGTGCAGTAGTTCATGCCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2339 GATCCGAGIACTITGGGAAGCCAAGACAGGIGGAICTCTTGAGCCCAGGAGTTTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2458 GGTGGTGCACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2399 AGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAAA-TTAGCCAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14615 GAGCAAGACCCCATCTCAGAAAAAAAAAAAAAAAAAATTTCAGATTTTG 14572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2578 GAGTGAGACCCTGTCTCAAAAAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-370-975B-1/C
Sequence 1, Application US/08370975B
Fatent No. 2622861
GENERAL INFORMATION:
APPLICANT: Maley, Frank
APPLICANT: Maley, Gladys F.
APPLICANT: Waley, Karen X.B.
TITLE OF INVENTION: Human Deoxycytidylate Deaminase Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/370,975B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 184; DB 1;
Pred. No. 8.6e-28;
0; Mismatches 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Nixon, Hargrave, Devans & Doyle STREET: Clinton Square, P.O. Box 1051
CITY: Rochester
STATE: New York
                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 10-JAN-1995
CLASSTFICATION: 435
ATCHORY/AGENT INFORMATION:
NAME: Timian, Susan J.
REGIETRATION NUMBER: 34,103
REFERENCE/DOCKET NUMBER: 20894/80
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: DNA (genomic)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 4435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 74.7%;
Matches 257; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 20303 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (716)263-1636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (716)263-167
TELEFAX: (716)263-1600
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                       ZIP: 14603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy C
COMPUTER: IBM PC comp
                                                                                         COUNTRY: THEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-370-975B-6
```

```
154282 ATTGCTTGAACCTGGGAAGCAGAGGTTGCAGTGAGCGGAGATCGCACCACACTGCACTCCAG 154341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154162 GAATTTGAGACCAGTCTGGCCAATACGGTGAAACCCCTGTTTCTACTAAAAATACAAAAA 154221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2382 CCCAGGAGTITGAGGCCAGACTGCACAACACAGAGACCTGGTITCTACAAATAAA 2441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83 TGGTGGCTCATGCCTGTAATCCTAGCACTTTGGGAGGCTGAGGCAGGTGGATCATTTGAG 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2322 ATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154222 TACCCAGGTGTGGTCCACACCTGTAGTCTAAGCTACTCAGGAGGCTGAGGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2262 AAAGCAGAAGTGTCACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23 AAAGGAAAAAAAAAATTTTGATGGTTAGTCACCCAATAAATGTTCTGGTTGGCCGGGCG
                                                                                                                                                                                                                                                                                                                                                                                           2327 GITCAIGCCAGIGAICCGAGIACIIIGGGAAGCCAAGACAGGIGGAICTCIIGAGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                2387 GAGTTTGAGGCCAGACTGCACACACACGTGAGACCTCGTTTCTACAAATAATTAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAGCCAGGTGTGGTGCACACCTGTAGTCCCCAGGTACTCAGGAGGCTGAGGTAGTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTTTGAGACTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.9%; Score 184.8; DB 4; Length 161652; 77.1%; Pred. No. 1e-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Jobert, S. APPLICANT: Jobert, S. APPLICANT: Glordano, J.Y. TITLE OF INVENTION: ESTS and Encoded Human Proteins. PILE REFERENCE: GENSET, 054PR2 CURRENT FILING DATE: 2000-07-21 NUMBER FILING DATE: 2000-07-21 NUMBER OF SEQ ID NOS: 19335 SOFTWARE: Patent.pm SEQ ID NO 13959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 184.4; DB 4;
Pred. No. 2.6e-28;
2; Mismatches 108;
                                                                                                                                                                                                                                                                                                                             67;
                                                                                                                                                                                                                                                                                                                             0; Mismatches
CURRENT APPLICATION NUMBER: US/09/497,855A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13959, Application US/09621976
Patent No. 6639663
Patent INFORMATION:
APPLICANT: Dunas Milne Edwards, J.B.
              CURRENT FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: 60/120,592
PRIOR FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: 60/118,760
PRIOR FILING DATE: 1999-02-05
NUMBER OF SEQ ID NOS: 54
SEQ ID NO 40
LENGTH: 161652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.9%;
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 77.1
Matches 225; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-621-976-13959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo : US-09-621-976-13959
                                                                                                                                                                                                                                                US-09-497-855A-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69957 TTAAAAATTAGCTGGCATGGTGGCACCCACCTGTAGCCCCAGCTACTTGAGAGGCTGA 70016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGCCCAGGAGTTTGAGGCCAGACTGCACACACACAGGACCTCGTTTCTACAAATAA 2437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAAAAATTAGCCAGGTGTGGTGGTGCACCTGTAGTCCCCAGGTACTCAGGAGGCTGA 2497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACC 2557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Hiang, Tim
TITLE OF INVENTION: HIGH-THROUGHPUT METHODS FOR DETECTING DNA METHYLATION
FILE REPERENCE: UNO1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69837 geoccaercercercercarerariceracrecirridesaccercacercacerraci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 81001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 185; DB 4;
Pred. No. 7.7e-28;
                                                                                                                                                                                                    OTHER INFORMATION: 20-842-115.mis
NAME/KEY: primer_bind
LOCATION: 45443..45461
OTHER INFORMATION: 20-842-115.mis complement
NAME/KEY: primer_bind
LOCATION: 77039..77057
OTHER INFORMATION: 20-853-415.mis
NAME/KEY: primer_bind
LOCATION: 77039..77077
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: primer_bind
COCATION: 77059..77077
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc binding
LOCATION: 1227..1251
OTHER INFORMATION: 20-853-415.mis complement
NAME/KEY: misc binding
LOCATION: 1227..1251
OCHION: 12235..1255
                                                                                                                                                   OTHER INFORMATION: 20-841-149.mis complement NAMES/KEX: PITIONE Lind LOCATION: 45423...4541.
OTHER INFORMATION: 20-842-115.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                         OTHER INFORMATION: 17-41-250.mis complement
NAME/KEY: primer bind
LOCATION: 42199.74217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CONTRER INFORMATION: 20.841-149.probe
NAME/KEY: misc binding
LOCATION: 45434.
COTHER INFORMATION: 20-842-115.probe
NAME/KEY: misc binding
LOCATION: 77046..77070
COTHER INFORMATION: 20-853-415.probe
US-09-750-580-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 40, Application US/09497855A Patent No. 6605432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: 17-42-319.probe NAME/KEY: misc_binding LOCATION: 15229..1523 UCHER INFORMATION: 17-41-250.probe NAME/KEY: misc_binding LOCATION: 42206..42230
                                                                                   OTHER INFORMATION: 20-841-149.mis
NAME/KEY: primer bind
LOCATION: 42219.42237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 77.5%;
Matches 224; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-09-497-855A-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

2321

82

· 0

2381

154161 2446

2386

g ò g à qq ઠે g à

```
: polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                  : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base C or
                                                                                                                                                                   : polymorphic base C or
                                                                                                                                                                                                                                                     : polymorphic base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COTHER INFORMATION: 20-828-311.mis

NAME/KEY: primer_bind
LOCATION: 1240..1258

OTHER INFORMATION: 20-828-311.mis complement
NAME/KEY: primer_bind
LOCATION: 12328..12346

OTHER INFORMATION: 17-42-319.mis
NAME/KEY: primer bind
LOCATION: 12348..12366

OTHER INFORMATION: 17-42-319.mis complement
NAME/KEY: primer bind
LOCATION: 12348..12366

OTHER INFORMATION: 17-42-319.mis complement
NAME/KEY: primer bind
LOCATION: 15222..15240

OTHER INFORMATION: 17-41-250.mis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: 17-42.rp complement NAME/KEY: primer_bind LCCATION: 14992.15012 OTHER INFORMATION: 17-41.pu NAME/KEY: primer_bind LOCATION: 15460.15482 OTHER INFORMATION: 17-41.rp complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    complement
                                          LOCATION: 15969..17969
OTHER INFORMATION: 3'regulatory region
                                                                                                                                                                               NAME/KEX: INCRMATION: 20-828-311:
NAME/KEX: Allele
LOCATION: 12347
LOCATION: 12347
CUCRATION: 15241
CUCATION: 15241
CUCATION: 15241
CUCATION: 42218
CUCATION: 42218
CUCATION: 42218
CUCATION: 4242
CUCATION: 45442
CUCATION: 45442
CUCATION: 45442
CUCATION: 45442
CUCATION: 45442
CUCATION: 5929. 949
CUCATION: 77058
CUCATION: 77058
CUCATION: 77058
CUCATION: 77058
CUCATION: 17059
CUCATION: 17059
CUCATION: 17059
CUCATION: 12029. 149
CUCATION: 12029. 1337
CUCATION: 12029. 12050
CUCATION: 12031. 12050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: DEFINED.

NAME/KEY: DEFINED.

LOCATION: 42070. -42090

OTHER INFORMATION: 20-841.pu
NAME/KEY: PERMEY bind

LOCATION: 42572. -42591

OTHER INFORMATION: 20-841.rp

NAME/KEY: PERMEY bind

LOCATION: 45528. -45347

OTHER INFORMATION: 20-842.pu
NAME/KEY: PERMEY bind

LOCATION: 45633. -45883

OTHER INFORMATION: 20-842.rp

NAME/KEY: PERMEY bind

LOCATION: 7664. -76664

OTHER INFORMATION: 20-853.pu

NAME/KEY: PERMEY bind

LOCATION: 7716. -77185

OTHER INFORMATION: 20-853.rp

OTHER INFORMATION: 20-853.rp

OTHER INFORMATION: 20-853.rp

COTHER INFORMATION: 20-853.rp
                                                                                                                            LOCATION: 1239
OTHER INFORMATION: 20-828-311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: 1/-
NAME/KEY: primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
FILE REFERENCE: 89.U32.CIP
CURRENT PRILNG DATE: 2000-12-28
FRIOR FILING DATE: 2000-06-21
FRIOR PELICATION NUMBER: PCT/TB00/0101
FRIOR FILING DATE: 1999-12-20
FRIOR FILING DATE: 1999-12-20
FRIOR FILING DATE: 1999-12-22
FRIOR FILING DATE: 1999-06-25
FRIOR FILING DATE: 1999-06-25
FRIOR FILING DATE: US 60/141,032
2417 AGACCTCGTTTCTACAATAATAATTAAAAATTAGCCAGGTGTGGTGCACCTGTAGT 2476
                                                                                                                                                                                                                             2477 CCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAA 2536
                                                   594 AGCCGAGGTGGGTGGATCATCTGAGGTCTAGGAGTTTAAGACCAGCCTGGCCAACATGGCA 653
                                                                                                                                                                                                                                                                          2537 CTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yen, Frances
Denison, Blake
Bour, Barbara
Bibain, Bernard
Dumas Milne Edwards, Jean-Baptiste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2597 AAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       834 AAAAAAAGAGAGTTTTTTTTTCTG 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAME/NEAL MISC feature
LOCATION: 10946..12946
OTHER INFORMATION: 5'regulatory region
NAME/KEY: exon
LOCATION: 12947..12958
OTHER INFORMATION: exon 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09750580 Patent No. 6455280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 14271..15968
OTHER INFORMATION: exon 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: exon
LOCATION: 13470..13526
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 13641..13752
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 1
LENGTH: 81001
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : variable motif ATTTA or TTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: allele
LOCATION: 2844
OTHER INFORMATION: 10-513-262 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WAME/KEY: allele
COCATION: 1128
COCATION: 1028
THER INFORMATION: 10-508-191 : polymorphic base C or T
FRANCKEY: allele
COCATION: 1182
DYSER INFORMATION: 10-508-245 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ör
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic base G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1570
DTHER INFORMATION: 10-509-295 : deletion of C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 2323

CTHER INFORMATION: 10-511-337 : insertion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WAME/KEY: misc feature
LOCATION: 17555..20674
DTHER INFORMATION: 3'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEX: allele
LOCATION: 2623
OTHER INFORMATION: 10-512-318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: allele
LOCATION: 2832
OTHER INFORMATION: 10-513-250
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OCATION: 1559
THER INFORMATION: 10-509-284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OCATION: 1827
THER INFORMATION: 10-510-173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
LOCATION: 2341
OTHER INFORMATION: 10-512-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 2048
OTHER INFORMATION: 10-511-62
FEATURE:
                                                                                                          NAME/KEY: exon
LOCATION: 12854..13023
OTHER INFORMATION: exon 10
                                                                                                                                                                                                                                                                  NAME/KEY: exon
LOCATION: 16567..16667.
OTHER INFORMATION: exon 12
                                                                                                                                                                                                                                                                                                                                                         LOCATION: 16775..16945
OTHER INFORMATION: exon 13
                                                                                                                                                                                                         LOCATION: 13308..13429
OTHER INFORMATION: exon 11
                                                                                                                                                                                                                                                                                                                                                                                                                                OCATION: 17063..17554
THER INFORMATION: exon 14
                                                         LOCATION: 12254..12340
OTHER INFORMATION: exon 9
OTHER INFORMATION: exon 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WAME/KEY: allele
                                                                                                                                                                       FEATURE:
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                           NAME/KEY: exon
```

```
2297 AAAAGTITCAGATGTIAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGA 2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 73.2%; Pred. No. 3.7e-28;
Matches 238; Conservative 0; Mismatches 87; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 6484
OTHER INFORMATION: 10-347-220 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 6467
OTHER INFORMATION: 10-347-203 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : polymorphic base C or T
                  LOCATION: 2934

OTHER INFORMATION: 10-513-352 : polymorphic base A or G PEATURE FEATURE: allele
LOCATION: 2947

OTHER INFORMATION: 10-513-365 : polymorphic base A or G PEATURE: allele
LOCATION: 3802

OTHER INFORMATION: 12-206-81 : polymorphic base A or G OTHER INFORMATION: 12-206-81 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 6019
OTHER INFORMATION: 10-346-141 : polymorphic base A or PEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        : polymorphic base G or
                                                                                                                                                                                                                                                                                                            NAWE/KEY: allele
LOCATION: 4088
OTHER INFORMATION: 12-206-366 : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: allele
LOCATION: 6338
OTHER INFORMATION: 10-347-74 : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base C
                                                                                                                                                                                                                                                                    : deletion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 6183
OTHER INFORMATION: 10-346-305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: allele
LOCATION: 6429
OTHER INFORMATION: 10-347-165
FEATURE:
                                                                                                                                                                                                               FEATURE:
NAME/KEX: allele
LOCATION: 4062
OTHER INFORMATION: 10-343-231
                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 4109
DIHER INFORMATION: 10-343-278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 6141
OTHER INFORMATION: 10-346-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: 10-347-111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: 10-343-339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 5903
OTHER INFORMATION: 10-346-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: allele
LOCATION: 4170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: allele
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 6375
```

; 0

```
US-10-170-097-651

Sequence 651, Application US/10170097

APPLICANT: Bougueleret, Lydie

APPLICANT: Chumakov, Ilya

APPLICANT: Chumakov, Ilya

APPLICANT: Chumakov, Ilya

APPLICANT: Chumakov, Ilya

TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS

TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS

TITLE OF INVENTION: GEN-7114XC2D1

FILE REFERENCE: GEN-7114XC2D1

CURRENT FILING DATE: 2002-06-10

FRIOR RPLICATION NUMBER: US/10/170,097

PRIOR FILING DATE: 2000-08-16

PRIOR FILING DATE: 2000-02-11

PRIOR FILING DATE: 1999-03-23

PRIOR FILING DATE: 1999-03-23

PRIOR FILING DATE: 1999-03-12

NUMBER OF SEQ ID NOS: 1304

SEQ ID NO 651

LENTH: 20674
      774 GTGAGCCGAGATCACGCCACTGCACTCTAGCCTGGGCAACAGAGCAAGACTCTATCTCAA 833
                                                                             2597 AAAAAAAAAAGTTTCAGATTTTG 2621
                                                                                                                   834 AAAAAAAGAGAGTTTTTCTTCTG 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 1123.3123
OTHER INFORMATION: 5'regulatory region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 5552..5633
OTHER INFORMATION: exon 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: exon 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 6349..6509
OTHER INFORMATION: exon 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 7379..7522
OTHER INFORMATION: exon 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: exon
LOCATION: 5758..5880
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: exon
LOCATION: 3124..3297
OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: exon
LOCATION: 3871..4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: exon
LOCATION: 8645..8854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5996..6099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: exon
LOCATION: 5996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                        g
                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2357 AGCCAAGACAGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTG 2416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2477 CCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAA 2536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2537 CTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAACAGAGTGAGACCCTGTCTCAA 2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  594 AGCCGAGGTGGATGCATCATCTGAGGTCAGGAGTTTAAGACCAGCCTGGCCAACATGGGA 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 714 cccadciacircaddaadcidaddcaadadaarcdcirdaaccidddadgacciddadcirdca 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    534 AAAAATCTGAAAAGCTGGCTGGCATGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2297 AAAAGTITCAGAIGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGTGTGGTGCACACCTGTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.9%; Score 185.8; DB 4; Length 20674; 73.2%; Pred. No. 3.7e-28; Live 0; Mismatches 87; Indels 0;
      : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : polymorphic base A or C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic base A or G
                                                                    : polymorphic base A or
                                                                                                                                                                                                                                                                  : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                  : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                 : polymorphic base C or
                                                                                                                                     : polymorphic base A
                                                                                                                                                                                                   : polymorphic base A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : polymorphic base C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : deletion of CTG
                                                                                                                                                                                                                                                                              NAME/KEY: allele
LOCATION: 7668
OTHER INFORMATION: 10-348-391 :
NAME/KEY: allele
LOCATION: 8608
OTHER INFORMATION: 10-349-47 :
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 8777

UOTHER INFORMATION: 10-349-216 :
NAME/KEY: allele
LOCATION: 8785

OTHER INFORMATION: 10-349-224 :
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 13341
COTHER INFORMATION: 10-507-170:
NAME/KEX: allele
LOCATION: 13492
OTHER INFORMATION: 10-507-321:
NAME/KEX: allele
LOCATION: 13524
OTHER INFORMATION: 10-507-353:
OTHER INFORMATION: 10-347-165
                    NAME/KEY: allele
LOCATION: 6467
CUTHER INFORMATION: 10-347-203
NAME/KEY: allele
                                                                                                                                                                     LOCATION: 6534
OTHER INFORMATION: 10-347-271
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 8703
OTHER INFORMATION: 10-349-142
NAME/KEY: allele
                                                                                                                                                                                                                                     LOCATION: 6611
OTHER INFORMATION: 10-347-348
                                                                                                          LOCATION: 6484
OTHER INFORMATION: 10-347-220
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: allele
LOCATION: 12429
OTHER INFORMATION: 10-350-332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 8926
OTHER INFORMATION: 10-349-368
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                             OCCATION: 8658
OTHER INFORMATION: 10-349-97
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 12171
OTHER INFORMATION: 10-350-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 73.29
Matches 238; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: allele
LOCATION: 13535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
```

d

à

90 AQ

 $\delta$ 

g

ò

```
: variable motif ATTTA or TTTTT
                                                UNIMENTALIAN INCOMENTALIAN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: allele
LOCATION: 4170
OTHER INFORMATION: 10-343-339 : polymorphic base G or T
NAME/KEY: allele
LOCATION: 5993
OTHER INFORMATION: 10-346-23 : polymorphic base A or G
NAME/KEY: allele
OTHER INFORMATION: 10-346-141 : polymorphic base A or G
NAME/KEY: allele
OTHER INFORMATION: 6119
OTHER INFORMATION: 6141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: 10-343-231 : deletion of C
NAME/KEY: allele
OTHER INFORMATION: 12-206-366 : polymorphic base C or T
NAME/KEY: allele
LOCATION: 4109
LOCATION: 4109
OTHER INFORMATION: 10-343-278 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: 10-347-111 : polymorphic base G or C NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : polymorphic base A or G
LOCATION: 1128
OTHER INFORMATION: 10-508-191 : polymorphic base C or T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION: 10-347-74 : polymorphic base A or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : polymorphic base G or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION: 10-346-305 : polymorphic base C or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: allele
LOCATION: 2947
OTHER INFORMATION: 10-513-365 : polymorphic base A or
LOCATION: 3012
OTHER INFORMATION: 12-206-81 : polymorphic base A or
OTHER INFORMATION: 12-206-81 : polymorphic base A or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DITHER INFORMATION: 10-346-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: allele
LOCATION: 6183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: allele
LOCATION: 4062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 6429
                                  APPLICANT: BLUGGLETEL, Lydie
APPLICANT: Chumakov, Ilya
APPLICANT: Chumakov, Ilya
APPLICANT: Chumakov, Ilya
TITLE OF INVENTION: BIALLELIC MARKERS DERIVED FROM GENOMIC REGIONS CARRYING
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
TITLE OF INVENTION: GENES INVOLVED IN ARACHIDONIC ACID METABOLISM
CURRENT APPLICATION NUMBER: US 09/502,330
PRIOR FILING DATE: 1090-05-07
PRIOR FILING DATE: 1999-05-07
PRIOR FILING DATE: 1999-05-07
PRIOR FILING DATE: 1999-03-23
PRIOR FILING DATE: 1999-03-23
PRIOR FILING DATE: 1999-03-23
PRIOR FILING DATE: 1999-02-12
NUMBER OF SEQ ID NOS: 1304
SCOTTAND OF THE PRIOR PARENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAME/KEY: misc feature
LOCATION: 1123...3123
OTHER INFORMATION: 5'regulatory region
NAME/KEY: exon
CATION: 3124...3297
OTHER INFORMATION: exon 1
NAME/KEY: exon
LOCATION: 3871...4072
LOCATION: 3871...4072
OTHER INFORMATION: exon 2
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 17063..17554
OTHER INFORMATION: exon 14
NAME/KEY: misc. feature
LOCATION: 17555..20674
OTHER INFORMATION: 3'regulatory region
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 16775..16945
OTHER INFORMATION: exon 13
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOCATION: 12854..13023
THER INFORMATION: exon 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 13308..13429
OTHER INFORMATION: exon 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COCATION: 16567..16667
OTHER INFORMATION: exon 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: exon
LOCATION: 8645.8854
OTHER INFORMATION: exon 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: exon
LOCATION: 7379..7522
OTHER INFORMATION: exon 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 5758..5880
OTHER INFORMATION: exon 4
NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 6349..6509
OTHER INFORMATION: exon 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: exon 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COCATION: 5552..5633
OTHER INFORMATION: exon 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 5996..6099
OTHER INFORMATION: exon 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OCATION: 12254..12340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Pater
SEQ ID NO 651
LENGTH: 20674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AME/KEY: exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
```

us-10-005-907-1.rni

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2276 ACTATTTCAAGTCAGTGCTCAAAAAGTTTCAGATGTTAAGCTGGTGATGCAGTTCATGCC 2335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2336 AGTGATCCGAGTACTTTGGGAAGCCAAGACAGGTGGATCTCTTGAGCCCAAGAGTTTGAG 2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2396 GCCAGACTGCACAACACAGTGAGACCTCGTTTCTACAAATAATTAAAAATTAGCCAGGT 2455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2134 GIGGIGGIGCACACCTGIAGICCCAGCTACTCGGGAGGCTGAGACAGGAGATTIGCTIGA 2193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2074 ACCAGCCTGGCCAACATGGTGAAACCTTGTCTCTACTAAAAATACAAAATTAGCCAGGC 2133
                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1955 ACATTITICCCATTICIGICTICALCAAAACTGAAGITAGCTGGGTGTGGGGGCTCATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2015 TGTAATCCCAGCACTTTGGG-GGCCAAGGAGGTGGATCACTTGAGATCAGGAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGTGGTGCACACCTGTAGTCCCAGGTACTCAGGAGGCTGAGGTAGTAGGATTGTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2516 GACTGGGAGGTTGAGGCTGAACTGAGCCAGGATCTTGCCACCACATTCCAGCTTGGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 2336;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.0%; Score 186.6; DB 4; Length; Best Local Similarity 73.6%; Pred. No. 1.5e-28; Matches 251; Conservative 0; Mismatches 89; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGTGAGACCCTGTCTCAAAAAAAAAAAAAAGTTTCAGA 2616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGCAAGACTCCATCTCAAAAAAAAAAAAAAGGAGA 2294
                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/140,002
CURRENT FILING DATE: 2002-05-06
Prior Application removed - See Palm or File Wrapper NUMBER OF SEQ ID NOS: 550
LENGTH: 2336
                Sequence 383, Application US/10140002 Patent No. 6725730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: unsure
COCATION: 1620, 1673
CTHER INFORMATION: unknown base
US-10-140-002-383
                                                                                                                         Desnoyers, Luc
Filvaroff, Ellen
Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                                                                                                                        Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                               Smith, Victoria
Stewart, Timothy A.
                                                               APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
                                                                                                                                                                                                                                                                                                                     Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                  Sherwood, Steven
                                                                                                                                                                                                                                                                                                        Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-09-620-312D-967
-10-140-002-383
                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2456
                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

; Sequence 967, Application US/09620312D

```
1034 GGGAGGATGACTTGAGGCCAGGAGTTGGAGACCAGCCTGGCCAACAACATGGAAACCCTGT 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2426 TICTACAAATAATAAAAATTAGCCAGGTGTGGTGGTGCACACCTGTAGTCCCAGGTAC 2485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  974 AdAaGahGGCCGGGCGTGGTGCCTCATGCCTGTAATTCCAGCACTTTGGGAGGCTAAGGC 1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2486 TCAGGAGGCTGAGGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAG 2545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1094 CTCTACTAAAAATACAAAATTAGCCTGGCGTGGTGGTGCACACCTGTAATCCCAGCTAC 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1154 TCTGGAGGCTGAGGAGAATCACTTGAACCCTGGAGGCAGAGGTTGCAATGAGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2306 AGAIGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.9%; Score 186.2; DB 4; Length 1426; Best Local Similarity 75.9%; Pred. No. 1.5e-28; Matches 230; Conservative 0; Mismatches 73; Indels 0;
                                                                                                                                                                                        Chen,
Chen,
Chen,
ANT: Xue, Aidong J.
CANT: Yang, Yonghong
LICANT: Yang, Yonghong
APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Dian-Rui
APPLICANT: Wang, Durul
APPLICANT: Wang, Durul
APPLICANT: Wang, Durul
APPLICANT: John Tillinghast
APPLICANT: John Tilling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 651, Application US/09641638; Patent No. 6432648; GENERAL INFORMATION:
                                                                                                                                                                      Ren, Feiyan
Chen, Rui-hong
Zhao, Qing A.
Wehrman, Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Zhang, Jie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1274 AAA 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2606 AAA 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-09-641-638-651
                                                                                                                          APPLICANT:
APPLICANT:
```

ö

```
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (47)..(991)
US-09-584-568C-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA 2608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA 1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
US-09-584-568C-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1307
            1181.4
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
                                                                                                                                                                                                                      180
180
179.6
179.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1, Appli
1395, A
1395, A
1395, A
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
5, Appli
6, Appli
7, Appli
7, Appli
8, Appli
8, Appli
9, Appli
9, Appli
9, Appli
1, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1380, Ap
                                                                                                     2004, 13:35:33; Search time 288 Seconds (without alignments) 9284.680 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued Patents NA:*

.: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

.: /cgn2_6/ptodata/1/ina/5G_COMB.seq:*

.: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

.: /cgn2_6/ptodata/1/ina/RECOMB.seq:*

.: /cgn2_6/ptodata/1/ina/RECOMB.seq:*

.: /cgn2_6/ptodata/1/ina/PcTUS_COMB.seq:*

.: /cgn2_6/ptodata/1/ina/PcTUS_COMB.seq:*
GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-584-568C-1

US-10-140-002-383

US-09-641-638-651

US-09-641-638-651

US-09-497-651

US-09-497-855A-4

US-09-497-855A-4

US-09-756-53

US-09-756-53

US-08-370-9758-6

US-08-370-9758-6

US-08-370-9758-6

US-08-370-9758-1

US-08-724-394A-21

US-08-724-394A-21

US-09-742-1

US-09-016-434-1419

US-09-016-434-1419

US-09-016-434-1419

US-09-016-434-1419

US-09-016-928-5

US-08-010-928-5

US-08-017-053A-5

US-09-672-717-230

US-09-672-717-230

US-09-672-717-230

US-09-672-717-230

US-09-916-807-938-5

US-09-916-807-938-5

US-09-916-807-938-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-804-471A-3
US-10-238-709-3
US-09-023-655-1380
                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                              824507 segs, 355394441 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                      Bw model
                                                                                                                                                                                                                                            IDENTITY_NUC Gapcp 10.0
                                                                      using
                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
                                                                                                                                                                       US-10-005-907-1
3762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                174493
174493
1855
                                                                      nucleic search,
                                                                                                        November 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182.8
182.6
182.6
182.6
182.6
182.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187.8
186.6
186.6
185.2
185.8
185.8
184.4
184.2
184.2
184.2
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
184.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183.8
183.4
183.4
                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                      OM nucleic
                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                               Sequence:
                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              000
```

```
2365
                                                                                                                                  Sequence 45, Appl
Sequence 42, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 9, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 2252, Ap
Sequence 2252, Ap
Sequence 2252, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1127 crcracrarararacarantragecresceres estes estes estes establicados 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2306 AGATGTTAAGCTGGTGATGCAGTTCATGCCAGTGATCCGAGTACTTTGGGAAGCCAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1007 AGAAGATGGCCGGGCGTGGTGCTCATGCCTGTAATTCCAGCACTTTGGGAGGCTAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2426 TICTACAAATAAATAAAAATTAGCCAGGTGTGGTGCTGCACCTGTAGTCCCAGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2486 TCAGGAGGCTGAGGTAGTAGGATTGTTTGAGACTGGGAGGTTGAGGCTGAACTGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1187 rendeadderdaadcaddaarearingaaceerddagdeadderdeangadeega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2366 AGGTGGATCTCTTGAGCCCAGGAGTTTGAGGCCAGACTGCACAACACAGTGAGACCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09584568C
Sequence 1, Application US/09584568C
Sequence 1, Application US/09584568C
GENERAL INFORMATION:
APPLICANT: Glucksmann, Maria, Alexandra et al.
APPLICANT: Glucksmann, Maria, Alexandra et al.
TITLE OF INVENTION: 33167, A NOVEL HUMAN HYDROLASE AND USES THEREFOR FILE REFERENCE: MNI-140
CURRENT APPLICATION NUMBER: US/09/584,568C
CURRENT FILING DATE: 2000-05-31
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn Ver: 2.0
                              Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1332;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 5.0%; Score 187.8; DB 4; Best Local Similarity 76.2%; Pred. No. 7.2e-29; Matches 231; Conservative 0; Mismatches 72;
                       US-09-526-193A-16
US-09-792-616-1
US-09-792-616-1
US-09-743-739-42
US-09-988-113-42
US-09-543-771-11
US-09-541-171-11
US-09-18-096-10
US-09-621-976-2552
US-09-761-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                              4768
107820
1504
15104
15104
44848
66933
66933
72049
72049
72004
9500
66804
```

ö

This Page Blank (uspto)

Search completed: November 19, 2004, 02:51:07 Job time : 3587 secs

RESULT 15 AX740457 LOCUS DEPINITION Sequence 46 from Patent W002020756. AX740457 VERSION VERSION AX740457.1 GI:30523621 KEYWORDS SOURCE ORGANISM Homo sapiens (human) ORGANISM Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homonidae; Homo.	AUTHORS Stuart,J., Lincoln,S.E., Altus,C.M., Dufour,G., Chalup,M., Hillman,J.L., Jones,A.L., Yu,J.Y., Wright,R.J., Gietzen,D., Liu,T., Yap,P., Dahl,C.R., Momiyam,M.G., Bradley,D., Rohatgi,S., Harris,B., Roseberry, Ann,M., Gerstin,E.H., Peralta,C.H., David,M.H., Panazr, Scott,R., Flores,V., Daffo,A., Marwaha,R., Chen,A.J., Chang,S.C., Au,A.P. and Inman,R.R. Secretory molecules JOURNAL Patent: WO 2020756-A 46 14-MAR-2002; FEATURES Location/Qualifiers Source   Location/Qualifiers   Location/Qualifiers	/db_xref="taxon:9606" /note="Incyte ID No: LG:018739.2:2000SEP08" Alignment Scores: 5.22e-07 Length: 1643 Score: 159.00 Matches: 47 Percent Similarity: 50.64% Conservative: 32 Best Local Similarity: 30.64% Conservative: 32	District   District	30 CATATCGCT 121 LeuGlnAsp 42		Qy         62 SerGlySerGluGluValCysTyrThrVallleAsnHis1leProHisGlnArgSer 80           :::	Qy 101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120 :::
404 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGCCCAGA 102 PheArgGluArgSerGluThrGluTyrAlaLeubeuArgThrSerValSerArgPrc 464 TCCTTGGGAGAACTGAGTATTCACTTCTACTTCTAAGAGCTTCTAAGAGCCC 122 SerCysThrHisGluHisAspTyrGluValValPheProHis 135 524 CATGCCCGATCCCCAGAAGATGAATATGAATTCTCTCATGCCTCAC 568 CO733169 2505 hn HWA 11222 CATGCCTCAC 568	Sequence 19103 from Patent W002068579.  (Q733169.1 GI:42315682 Homo sapiens (human) M Homo sapiens (human) M Homo sapiens (human) M Homo sapiens Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W. Kits, such as nucleic acid arrays, comprising a majo humanexons or transcripts, for detecting expression thereof	JOURNAL Patent: WO 02068579-A 19103 06-SEP-2002;  PEATURES	Alignment Scores:  Pred. No.:  Pred. No.:  Score:  Score:  Percent Similarity:  Best Local Similarity:  23.29\$  Indels:  Gaps:  At	-10-005-907- 14 2068	53 217 73	74 HisIleProHisGlnArgSerSerLeuSerSerAsnAspGagGTGCTATACCCTCATCAT  74 HisIleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIle	113 2359 132 2419

```
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                              /map="3q13.13"
/cell_line="DHL16"
                                                                                                                                                                                                                                                                                           /chromosome="3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135) x AY212246
                                                                                                                                                                                                                                                                                                                                                     'gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                  'note="GCAT2"
                                                                                                                                                                                                                                                                                                                                                                                            gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8,77e-08
169.50
51.61%
30.32%
23.71%
                                                                                                                                           (bases 1 to 3270)
                                                                                                                                                                                                                                                                                                                                 .3270
                                                                                                                                                                                                                                                                                                                                                                                 .643
                                                                                                                                                                                                                                          1. .3270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
                                                                                                                               12819018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                  MEDLINE
PUBMED
                               AUTHORS
                                                                                                                                                          AUTHORS
                     REFERENCE
                                                                                                                                             REFERENCE
                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                               FEATURES
                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIBINC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AY212246 3270 bp mRNA linear PRI 14-OCT-2003 Homo sapiens germinal center B-cell expressed transcript 2 (GCET2) mRNA, complete cds.
                                                                                                                                                               /product "HGAL"

/protein_id="AAO21701.1"

/db xref="d1:27733683"

/translation="MGNSLLRENRRQONTQEMPMNVEMQSPKQRTSRCWDH11AEGCF

/translation="MGNSLLRENRRQONTQEMPMNVEMQSPKQRTSRCWDH11AEGCF

AERYYENVECTEPREXQDSQNENEMSSTFIQDNVDQTYSEELCYTLINHRVLCTRPSGNS

AERYENVECKAERPESLGGTETEYSLLHMPSTDPRHARSPEDEYELLMPPHRISSHF
LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    170 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350 TCCCAAAAGAAAAGAAAAGAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                      173 ATGGGAAATTCTCTGCTGAGAGAAAACAGGCGGCAGCAGCAGAACACTCAAGAGATGCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63 GlyserGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                            MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
     Stanford University, 269 Campus Drive, CCSR building,
, Palo Alto, CA 94305-5151, USA
Location/Qualifiers
                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
173. 709
/note="germinal center-associated lymphoma; contains
modified ITAM motif, similar to mouse M17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerCys --- ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      590 CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                    1654
47
33
33
54
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----LysLysGlyAsnProAspGluGluArgLysArg----
                                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                Mismatches:
                                                                                                                                                                                                                                                                                                                                                           Indels:
                                                                                                                                                                                                                                                                                                       Length:
                                                                 organism="Homo sapiens'
                                                                                                                                                                                                                                                                                                                                                                                                    x AF521911 (1-1654)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:27948576
                                                                                                                                                  codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                       4.16e-08
                                                                                                                                                                                                                                                                                                                 169.50
51.61%
30.32%
23.71%
                                                 . .1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AY212246
AY212246.1
                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                            Room 1100,
             Medicine,
                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31
                                                                                                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                       .. oN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AY212246
LOCUS
                                                                                                            CDS
                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
```

```
/codon start=1
/product="germinal center B-cell expressed transcript 2"
/product="germinal center B-cell expressed transcript 2"
/protein_id="AAO22147.1"
/db_xref="G1:2748577"
/translation="MGNSLIRENRRQONTOEMPWNVRMQSPKQRTSRCWDHHIAEGGF
/translation="MGNSLIRENRRQONTOEMPWNVRMQSPKQRTSRCWDHHIAEGGF
AEBYYENVCRAERPERSLGGTETEYSLIAMPSTDPRHARSPEDEYELIMPHRISSHF
LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                          Pan, Z., Shen, Y., Du, C., Zhou, G., McKeithan, T., Rosenwald, A., Staudt, L. and Chan, W.C. Direct Submission Submission Submitted (07-JJN-2003) Pathology, University of Nebraska Medical Center, #42, Omaha, NE 68198, USA Location/Qualifiers
l (bases 1 to 3270)
Pan,Z., Shen,Y., Du,C., Zhou,G., Rosenwald,A., Staudt,L.M.,
Greiner,T.C., McKeithan,T.W. and Chan,W.C.
Two newly characterized germinal center B-cell-associated genes,
neoplastic B cells (1), 135-144 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="similar to Mus musculus germinal center transcri
M17; similar to MGC40441 sequence in GenBank Accession
Number BC030506"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 107 ATGGGAAATTCTCTGCTGAGAAAACAGGGGGGGGGAGCAGCAGAACACTCAAGAGATGCCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               227 GAAGGGIGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            167 AACGIGAGAAIGCAAAGCCCCAAACAGAACAICCAGAIGCIGGGAICACCAIAICGCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                        Zhou, G., McKeithan, T., Rosenwald, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3270
47
33
54
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-3270)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
```

ω

```
2 (bases 1 to 1654)
Lossos,I.S., Alizadeh,A.A. and Levy,R.
Direct Submission
Submitted (16-JUN-2002) Division of Oncology, Department of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                471 CATGCCCGATCCCCAGAAGATGAATTGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                             1532
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1654 bp mR. complete cds.
                                                                                                                                                                                                                                                 Length:
Matches:
                                               /db_xref="LocusID:257144"
/db_xref="MIM:607792"
                                                                                                                                                                                                                                                                                                                                   Indels:
                                                                                                                                                                                                                                                                                                                                                       Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                  (1-1532)
                                                                                                                                                       LQQPRPLMAPSETQFSHL"
                                                                                                                                                                                                                                                                                                                                                                                                  x BC030506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens HGAL mRNA,
AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AF521911.1 GI:27733682
                                                                                                                                                                                                                                               3.82e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                               169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                              US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12509382
                                                                                                                                                                                                                      Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                    Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AF521911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Scheefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Carinci, P., Frange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., Worley, K.C., Hale, S.J., Garcia, A.M., Garanen, R.J., Malek, J.A., Gunaratne, P.H., Richards, S.W., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Schmutz, J., Myers, R.M., Schnerch, A., Schein, J.E., Jones, S.J., and Marra, M.A., Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: nisc_mgcanhgri.nih.gov
Akhter.N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
Blakesley,N.L., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
Hansen,N., Ho,S.-L., Karlins,B., Kwong,P., Laric,P., Legaspi,R.,
Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C.,
Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,
Young,A., Zhang,L.-H. and Green,E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 64 Row: a Column: 15 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 22749536. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
Submitted (07-MAY-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lou Staudt
cDNA Library Preparation: Life Technologies, Inc.
DNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),
Gaithersburg, Maryland;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="germinal center expressed transcript 2"
/protein_id="AAH30506.1"
                                                                                                                                                                                                                                                                                                                                                                                                                           Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) 12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="GCET2"
/note="Eynonyms: MGC40441, HGAL, GCAT2"
/db_xref="LocusID.257144"
/db_xref="MIM:607792"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:40441 IMAGE:4385178"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue type="Lymph, lymphoma
/clone_lib="NIH MGC_85"
/lab_host="DH10B"
/note="Vector: pCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Web site: http://www.nisc.nih.gov/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="GCET2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 1532)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . .1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                               PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                              TITLE
```

```
/translation="MGNSLLRENRRQQNTQEMPWNVRMQSPKQRTSRCWDHHIABGCF
CLPWKKILIFEKRQDSQNENERMSSTPIQDNVDQTYSEELCYTLINHRVLCTRPSGNS
AEEYYENVPCKAERPRESLGGTETEYSLLHMPSTDPRHARSPEDEYELLMPHRISSHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRI 14-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              411 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     291 TACTCAGAGGAGTGTGTATACCTCATCAATCATCAGGTTCTCTGTACAAGGCCATCA
                                                                                                                                                                                                                                                                                                                                             1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --- GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCCAAAACGAAAATGAAAGATGTCATCTACTCCCATCCGGGACAATGTTGACCGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               351 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys
```

```
as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest. The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases: Em.; EMBL; Sw.; SwISSPROT; Tr.; TREMBL; Wp.; WORMPEP; Information on the WORMPEP database can be found at http://www.sanger.ac.uk/Projects/C elegans/wormpep This sequence was generated from part of bacterial clone contigs of human chromosome 1. constructed by the Sanger Centre Chromosome 1 Mapping Group. Further information can be found at http://www.sanger.ac.uk/HGP/Chr1
RPII-978IIS is from the library PRCI-11.4 constructed by the group of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132080 caddaaaacdadaarddcacrdcrrcrdaadaacrdrcrrcrcrcrraartcacarc 132139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC030506
Homo sapiens germinal center expressed transcript 2, mRNA (cDNA clone MGC:40441 IMAGE:4385178), complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1532)
Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 ThrarglysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           132140 ccccarcagagarccrccrcaggcrccaargargargargaraaaaaacarrgaccrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56 GlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrValIleAsnHisIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  76 ProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185467
80
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                               Center: Wellcome Trust Sanger Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Web site: http://www.sanger.ac.uk
Contact: humquery@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-005-907-2 (1-135) x AL606804 (1-185467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /chromosome="1"
/clone="RP11-978115"
/clone_lib="RPCI-11.4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic_DN.
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                             -- Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:20987805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.29e-33
430.00
100.00%
100.00%
60.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .185467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BC030506.1
MGC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC030506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
BC030506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Luter Summission.

Submitted (16-007-2002) Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire, CB10 15A, UK. E-mail enquiries:

On Oct 24, 2002 this sequence version replaced gi:18121511.

During sequence assembly date is compared from overlapping clone version together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all regions were either double-erranded or sequenced with an alternate chemistry or covered by high quality data (i.e., phred quality >=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL606804 185467 bp DNA linear PRI 23-OCT-2002 Human DNA sequence from clone RP11-978115 on chromosome 1, complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5700 CAGGAAAACGAGAAATGGCAGTGGTTCTGAAGAAGTGTGCTGCTGTCTTTAATCACAT 5641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5640 CCCCATCAGAGATCCTCCCTGAGCTCCAATGATGATGATGAGAAACATTGACTCCCTC 5581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThranglysValargGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThr 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56 GlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThrVallleAsnHisIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76 ProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141268
80
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
                                                                                                        /note="assembly_name:Contig4"
7775. .8926
/note="assembly_name:Contig5"
89357. .100400
/note="assembly_name:Contig6"
100501. .11915
/note="assembly_name:Contig6"
/note="assembly_name:Contig7"
112016. .125713
/note="assembly_name:Contig7"
125814. .141268
                                                                    /note="assembly_name:Contig3"
67707. .77674
                           note="assembly_name:Contig2"
                                                                                                                                                                                                                                                                                                                                      note="assembly_name:Contig9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135) x AC074365 (1-141268)
                                                                                                                                                                                                                                                                                                                                                                               vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL606804.11 GI:24366459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 185467)
                                                                                                                                                                                                                                                                                                                                                             clone_end:SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.44e-33
430.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Almeida,J.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.14%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                    misc_feature
                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                  misc_feature
                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AL606804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
```

g

à

ò 엄 à d ઠે 132199

95

132259

```
111916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                8 €
                                          REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                            AUTHORS
TITLE
                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
                                                                                                                                                                                                                                                                                                    /procedin_dd="Bac85873.1"
/bd_xref="G1:34530355"
/db_xref="G1:34530355"
/tanslation="WYMLEDSNSSTGCGARNCVECLVFLSVLGCQSERKGQMRTQQAG
RWLRAGREASSETHDFBGTLILDFGSPELPLARGWQEHEPVVRCNVLPHAFSSWCFGG
NFPKWSETQELRNRVTVKRWEIISCENSGRK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC074365
Homo sapiens chromosome 1 clone RP11-115C4, WORKING DRAFT SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         558 CAAGATCAAGATAAAGAAAAGGCAAGAAGTTCATCCACTTCTAATCAGGAAAACGAGAAT 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArdodaAArrarcrccidcdAAAAcrc----- 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -------AGGCAGGAAATGACTACATTTGAAAGAAAACTT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cadititadabaaddicadadacadaatatgcccritcriagactrcrgriagtaggccr 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              678 recerdadecrecaardardardecrardadaacarreceredadadadadadada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114
                                                                                                                                                                                                     tissue type="cerebellum"
|clone lib="BRACE3"
|note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                        136. .537
/note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels:
                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="BRACE3002390"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x AK124520 (1-4136)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 unordered pieces.
AC074365
AC074365.5 GI:10280935
HTG; HTGS_PHASE1; HTGS_DRAFT.
Homo sapiens (human)
                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         7.16e-51
581.00
85.19%
84.44%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC074365
                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                       BOUTCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC074365/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                   FEATURES
                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
University School of Medicine, 4444 Forest Park Parkway, St. Louis, MO 63108, USA
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 141268)
Waterston, R. H.
                                                                                                                                                                                                                                                                  Direct Submission
Submitted (29-JUL-2000) Genome Sequencing Center, Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                         Sep 23, 2000 this sequence version replaced gi:9838075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               * NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center: Washington University Genome Sequencing Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1377: contig of 31377 bp in length
1378: contig of 31374 bp in length
1478: gap of unknown length
1478: 63011: contig of 31534 bp in length
1512: 64845: contig of 1734 bp in length
1514: 64845: contig of 1734 bp in length
1546: 67606: contig of 1734 bp in length
15607: 67706: gap of unknown length
15607: 67706: gap of unknown length
15774: gap of unknown length
15775: 98256: contig of 19482 bp in length
15775: gap of unknown length
15776: gap of unknown length
15777: gap of unknown length
15771: gap of unknown length
1571: contig of 11415 bp in length
1501: 112015: contig of 11415 bp in length
1501: 112015: contig of 118698 bp in length
1516: 12513: contig of unknown length
1514: 125813: gap of unknown length
1514: 141268: contig of 15455 bp in length
1514: 141268: contig of 15455 bp in length
1514: 141268: contig of 15455 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Quality coverage: 4.64 in Q20 bases; agarose-fp
Quality coverage: 4.81 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequencing vector: M13, 100%
Sequencing vector: M13, 100%
Sequencing vector: plasmid, 0%
Chemistry: Dye-primer ET; 100% of reads
Chemistry: Dye-terminator Big Dye; 0% of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 136274 bases at least Q40
Consensus quality: 138356 bases at least Q30
Consensus quality: 139182 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="assembly_name:Contig11"
63112. .64845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Insert size: 142000; agarose-fp
Insert size: 140368; sum-of-contigs
                                                                                                                                                     The sequence of Homo sapiens clone Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="genomic_Dr
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="RP11-115C4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome
                                                                                                                                                                                                              2 (bases 1 to 141268)
Waterston, R.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center code: WUGSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31478
63012
63112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64846
64946
67607
67707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            112016
125714
125814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77675
77775
89257
89357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100201
```

```
Scores:
                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                         . No. .
                                                              Alignment
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
AK124520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                      ORIGIN
                                                                                                                                                                                                                        ga
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Isogai, T., Sugiyama, T., Otsuki, T., Wakamatsu, A., Sato, H., Ishii, S., Yamamoto, J., Isono, Y., Nagai, K. and Irie, R.
Full-Length human cdna
Patent: EP 1440981-A 129 28-JUL-2004;
Research Association for Biotechnology (JP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 02-AUG-2004
             and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         437 CAAGATCAAGATAAGAAAAGCCAAGATTTCATCCACTTCTAATCAGGAAAACGAGAAT 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              616
                                                                                                                                                                                                                                                                                                                                                                                                                      436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                               40
HRI, and Biotechnology Center, National Institute of Technology Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: Reverse Proteomics Research Institute, HRI and RAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTTTAGAGAAAGGTCAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGCCCT
                                                                                                                                                                                                                                                                                                                                         1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                      -----AGGCAGGAATGACTACATTTGAAAGAAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlySerGlySerGluGluValCygTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                 41 GlnAspGlnAspLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497 gecagiogriforgaagaagigigoracacigicarifaarcacarccccarcagaarcc
                                                                                                                                                                                                                                                                                                                                                                                             21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4032
115
0
0
20
1
                                                                            1. .4032
/organism="Homo sapiens"
/molyppe="mRNA"
/db xref="taxon:9606"
/clone="BRACE3024537"
/clone lib="BRACE31"
/clone lib="BRACE3"
/note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                        377 ATGGGAAATTATCTCCTGCGAAAACTC------
                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 129 from Patent BP1440981.
CQ841482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4136 bp
                                                                                                                                                                                                                                                                                                                    US-10-005-907-2 (1-135) x AK126682 (1-4032)
                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CQ841482.1 GI:50893269
                                                                                                                                                                                                                        3.37e-51
584.00
85.19%
85.19%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                  Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CQ841482
                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                    Best Local
                                                                                                                                                                                                                               No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CQ841482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                    FEATURES
                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                             Pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Бb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₹
```

/organism="Homo sapiens"

```
Submitted (15-070-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-mall:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) WEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ninomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T.,
Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, B., Omura, Y., Abe, K.,
Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M.,
Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Wakamatsu, A., Ishi, S.,
Yamamoto, J., Isono, Y., Kawai-Hio, Y., Sato, K., Nishikawa, T.,
Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M.,
Kikuchi, H., Murakawa, K., Kanehori, K., Takahashi-Fujii, A.,
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S.,
NBDO human cDNA sequencing project
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             678 recercasecrecastratestrates de la recercaca de la recerca de la recerca de la recercaca de la recerca de la recercaca de l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MetGlyAsnTyrLeuleuArglysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          558 CAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuSerSerasnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens cDNA FLJ42529 fis, clone BRACE3002390.
                                                                                                                                                                                                                                 4136
114
1
0
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AK124520.1 GI:34530324
oligo capping; fis (full insert sequence)
Homo sapiens (human)
                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            498 ATGGGAAATTATCTCCTGCGAAAACTC-----
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-4136)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 (bases 1 to 4136)
Isogai, T. and Yamamoto, J.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x CQ841482
                                                                                                                                                                                                                                                                                       581.00
85.19%
                                                                                                                                                                                                                                                                                                                                                                                    84.44%
81.26%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
```

100

677

80

557

40

20

617

09

120 737

g ò

ઠે

```
Unpublished
                                                                                        Best Local Similarity:
                                                                          Percent Similarity:
                       Alignment Scores:
                                                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                           67
                                                                                                          Query Match:
DB:
                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
AK126682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                              à
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                            o mRNA linear PRI 19-MAY-2004 clone:QtrA-14007, full insert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hashimoto, K., Osada, N., Hida, M., Kusuda, J. and Sugano, S. Direct Submission
Submitteed (27-APR-2011) Katsuyuki Hashimoto, National Institute of Infectious Diseases, Division of Genetic Resources; 23-1, Toyama 1-chome, Shinjuku-ku, Tokyo 162-8640, Japan (E-mail:khashi@nih.go.jp, URL:http://www.nih.go.jp/yoken/genebank/, Tel:81-3-5285-1111(ex.2120), Fax:81-3-5285-1181)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="hypothetical protein"
/protein.id="BAB46903.1"
/db_xref="d1:13874586"
/tb_xref="d1:13874586"
/translation="hypotheticopkxskevssisnQenendsgseevcyTvinHipHRRSSLSSNDDGYENIDSLTRKVREFRERSETEYALLRISVSRPYSCTHEHDYEVVLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCCTGAGCTCCAATGATGATGGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGA 358
                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                              Osada, N., Hida, M., Kusuda, J., Tanuma, R., Hirata, M., Hirai, M., Terao, K., Suzuki, Y., Sugano, S. and Hashimoto, K. Prediction of unidentified human genes on the basis of sequence similarity to novel EDNAs from cynomolgus monkey brain (er) Genome Biol. 3, research0006.1-0006.5 (2001)
                   GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro
                                                           359 CAGITITAGAGAAAGGICAGAGAGAGATATGCCCTICTITAGGACTICTGTIAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    were constructed by oligo-capping method (Sugano et al., , Institute of Medical Science, University of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue type="temporal lobe right"
/clone_lib="macaque brain cDNA library QtrA"
/dev_stage="adult"
                                                                                                 CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                       oligo capping; fis (full insert sequence).
Macaca fascicularis (crab-eating macaque)
Macaca fascicularis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Macaca fascicularis"
|mol_type="mRNA"
|db_xref="taxon:9541"
|clone="QtrA-14007"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Custom primer used for sequencing (5' end primer [CTTCTGCTCTAAAAGCTGCG]; 3' end primer [CGACCTGCAGCTCGAGCACA]).
                                                                                                                                                                                                          AB060908
Macaca fascicularis brain cDNA o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                        AB060908.1 GI:13874585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOP10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lab host:
                                                                                                                                                                                                                                                           AB060908
                                                                                                                                                                                                         AB060908
                                101
                                                                                                   121
                                                                                                                                    419
                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                      RESULT 5
AB060908
                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
```

COMMENT

TITLE

CDS

FEATURES

```
Direct Submission
Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7
Razusa-Kamatari, Kisarazu, Chiba 292-0818, Japan
Razusa-Kamatari, Kisarazu, Chiba 292-0818, Japan
Benomicsöhri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)
NEDO human cDNA sequencing project supported by Ministry of Conomy, Trade and Industry of Japan; cDNA full insert sequencing:
Research Association for Biotechnology (RAB); cDNA full server construction: Helix Research Institute (HRI) (supported by Japan
Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRI 19-FEB-2004
                                                                                                                                                                                                                                                          87 AspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSer 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ninomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T.,
Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, E., Omura, Y., Abe, K.,
Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M.,
Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Wakamatsu, A., Ishii, S.,
Yamamoto, J., Isono, Y., Kawai-Hio, Y., Sato, K., Nishikawa, T.,
Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M.,
Kikuchi, H., Murakawa, K., Kanehori, K., Takahashi-Fujii, A.,
Nagahari, K., Masuho, Y., Nagai, K. and Isogai, T., Sugano, S.,
NEDO human, CDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          469
                                                                                                                                                                                                                                                                                                                                           46
                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                             7 ArglysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnProAspGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValCysTyrThrValIleAsnHisIleProHisGlnArgSerSerLeuSerSerAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           107 GluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGlu
                                                                                                                                                                                                                                                                                                                                27 GluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                       47 SerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens cDNA FLJ44728 fis, clone BRACE3024537. AK126682. GI:34533254 AK126682.1 GI:34533254 Homo sapiens (human) homo sapiens (human)
1924
120
                                                   Conservative:
Mismatches:
Indels:
                                Matches:
  Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         127 HisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            530 CATGATTACGAAGTTGTGCTTCCACAC 556
                                                                                                                                 Gaps:
                                                                                                                                                                            US-10-005-907-2 (1-135) x AB060908 (1-1924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 (bases 1 to 4032)
Isogai, T. and Yamamoto, J.
  8.44e-57
                     634.00
96.12%
93.02%
88.67%
```

DEFINITION

RESULT 3 CQ842314

q

ACCESSION VERSION KEYWORDS

ORGANISM

SOURCE

JOURNAL

TITLE

FEATURES

AUTHORS

REFERENCE

```
Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5-6 a 3-end one pass sequencing: RAB, and biotechnology center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: MRI and RAB.
                                                                                                                                        Suzuki,O., Sasaki,N., Aotsuka,S., Shoji,T., Ichihara,T.,
Shiohata,N., Matsumoto,K., Hirano,M., Sano,S., Nomura,R.,
Yoshikawa,Y., Matsumura,Y., Moriya,S., Chiba,E., Momiyama,H.,
Yoshikawa,Y., Katsuyama,S., Satoh,N., Matsunawa,H., Takahashi,E.,
Kataoka,R., Kuga,M., Kuroda,A., Satoh,I., Kamata,K., Takami,S.,
Terashima,Y., Watanabe,M., Sugiyama,T., Irie,R., Otsuki,T.,
Sato,H., Wakamura,M., Ishii,S., Yamamoto,J., Isono,Y.,
Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kanda,K.,
Wagatsuma,M., Murakawa,K., Kanehori,K., Takahashi-Pujii,A.,
Oshima,A., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S.,
Nagahari,K., Masuho,Y., Nayai,K. and Isogai,T.,
Unpublished
                                                     Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     59 ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGATCGAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mrNa"
/db xref="taxon:9606"
/db xref="taxon:9606"
/tissue_type="ovary"
/clone_lib="novARz"
/dev_stage="adult"
/note="cloning vector: pME188FL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x AK123798 (1-1709)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Isogai, T. and Yamamoto, J. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.12e-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          711.00
100.00%
99.26%
99.44%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 1709)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.:
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isogai,T., Sugiyama,T., Otsuki,T., Wakamatsu,A., Sato,H., Ishii,S., Yamamoto,J., Isono,Y., Nagai,K. and Irie,R.
Full-length human cdna
Patent: EP 1440981-A 961 28-UUL-2004;
Research Association for Biotechnology (JP)
                                                                                                                                                                                                   PAT 02-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          239 decadrecricadadadereneracierentradicatrocarcearcadadade 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGITITAGAGAAAGGICAGAGACAGAAIAIGCCCIICITIAGGACIICIGIIAGIAGGCCI 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        recercasecrecas reareares researes as a ses a se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59 ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGGAATCAAAAGAAGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlySerGlySerGluGluValCysTyrThrVallleAsnHislleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysserCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA linear clone NOVAR2000710.
   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1709
134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AK123798 1709 bp mRNA Homo sapiens cDNA FLJ41804 fis, clone NOVA AK123798 1 GI:34529425 oligo capping; fis (full insert sequence).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .1709
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                 Sequence 961 from Patent EP1440981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-005-907-2 (1-135) x CQ842314 (1-1709)
                                                                                                                                                                                                                                                                                                CQ842314.1 GI:50894101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.12e-65
711.00
100.00$
99.26$
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                          CQ842314
                                                                                                                                                                                                                                                                      20842314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
```

. No. .

Score:

ò 셤 ઠ g à qq

유 à d à g Š

ઠ

ORIGIN

298 100

80

RESULT 4 AK123798

238

118

40

N

```
/translation="MGNYLLRKLSCLGENOKKPKKGNPDEEFKROEMTTFERKLQDQD
KKSQEVSSTSNQENENGSGSEEVCYTVINHIPHQRSSLSSNDDGYENIDSLTRKVRQF
RERSETEYALLRTSVSRPCSCTHEHDYEVVFPH"
                                                                                                                                                                          PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                      cell
                                 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
       348 CAGITIAGAGAAAGGICAGAGACAGAATAIGCCCTICTIAGGACTICIGITAGTAGGACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              205 GGCAGTGGTTCTGAAGAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265 TCCTGAGCTCCAATGATGATGAGCTATGAGAACATTGACTCCCTCACAAGGAAAGTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAAAAGAAGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 LysellyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                          Nocka, K., Pirozzi, G. and Einstein, R.
Novel genes associated with allergic hypersensitivity and
extivation WO 0246389-A 1 13-UUN-2002;
UCB, S.A. (BE)
                                                                  135
                                                                                                   452
                                                                                                                                                                         linear
                                                            CysSerCysThrHisGluHisAspTyrGluValValPheProHis
                                                                                TGTTCCTGCACCCATGAGCATGATTATGAAGTTGTGTTTCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3762
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="unnamed protein product"
                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="CAD48808.1"
/db_xref="G1:23386430"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .3762
/organism="Homo sapiens"
                                                                                                                                                                   AX505122 3762 bp
Sequence 1 from Patent W00246389.
AX505122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                      AX505122.1 GI:23386429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-005-907-2 (1-135) x AX505122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.52e-65
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                              121
                                                                                                 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . No. .
                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                RESULT 2
AX505122
                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                           셤
                         d
                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: b Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21687148. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCAAG 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCCTGAGCTCCAATGATGATGACATGAGAAACATTGACTCCCTCACAAGGAAAGTGAGA 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                       Direct Submission
Submitted (19-FEB-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acute myelogenous leukemia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                          WITH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Parayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Brin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2648
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue type="Bone marrow,
/clone_lib="NIH MGC_55"
/lab_host="DH10B"
/note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .2648
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:9606"
/clone="IMAGE:4109064"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-005-907-2 (1-135) x BC024174 (1-2648)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.76e-65
715.00
100.00%
100.00%
                                                                                                        (bases 1 to 2648)
                                                                                                                           Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Rest Local Similarity:
                                                                                          12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .. ov
                                                                                        PUBMED
REFERENCE
                                                                                                                                           TITLE
JOURNAL
                                                                                                                         AUTHORS
                                                                       JOURNAL
                                                                                                                                                                                                                                REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
```

ПЪ

ð

OG .

δ

qq

ò

d

ò g à

à

```
November 18, 2004, 21:31:29 ; Search time 3546 Seconds (without alignments) 1800.369 Million cell updates/sec
                                                                                                                                                                                                                                                              1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9053458
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                       using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                            4526729 segs, 23644849745 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                              Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                     US-10-005-907-2
715
                                                                                         OM protein - nucleic search,
                                                                                                                                                                                                                                                                                                            BLOSUM62
                                                                                                                                                                                                                                                score:
                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                       Title:
Perfect :
                                                                                                                                       Run on:
```

Command line parameters:
-MODEL=frame+ p2n.model -DEV=xlh
-Q=/Capr2 1/05FTO\_spool/VS10005907/runat 16112004\_140457\_6169/app\_query.fasta\_1.327
-Q=/Capr2 1/05FTO\_spool/VS10005907/runat 16112004\_140457\_6169/app\_query.fasta\_1.327
-DE-GenEmb1 -QFWT=fastap -SUPFIX=rge -MINMATCH=0.1 -LOOPECL=0 -LOOPEXT=0
-UNITS=bits -QFWT=fastap -SUPFIX=rge -MINMATCH=0.1 -LAGOFEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=buman40.cdi -LIST=45
-DOCATIGN=200 -THR SCORED=pct -THR MAX=100 -THR MIND=0 -ALIGN=15 -MODE=LOCAL
-UNTEWT=pto -NORM=ext -HEAPSIZE=560 -WINIEN=0 -MAXLEN=200000000
-USER-USI0005907\_@CGN 1 1\_3731 @runat 16112004 140457\_6169 -NCPU=6 -ICPU=3
-NO WAAP -LAGGEQUERS -NEG SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DEV ITMEOUT=120 -WARN TIMEOUT=3 0 -THRADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6

gb\_pr:\* gb\_ro:\* gb\_sts:\* gb\_sy:\* gb\_un:\* gb\_vi:\* gb ba:\*
gb\_ntg:\*
gb\_om:\*
gb\_ov:\*
gb\_bat:\*
gb\_bat:\* 55: 77: 10: Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	BC024174 Homo sapi AX505122 Sequence CQ842314 Sequence AXI23798 Homo sapi
SUMMARIES	ID	BC024174 AX505122 CQ842314 AK123798
	DB	1
	% Query Match Length DB	2648 3762 1709 1709
		100.0 100.0 99.4 99.4
	Score	715 715 717 717
	Result No.	

	a	482 Segue	0 Homo	_	Human	506 Homo		Homo	Segue	AX740457 Sequence	AY500830 Mus muscu	fus mu	AK125521 Homo sapi	Ношо	4 Ношо	0 Ношо	Plasn		Mus	AC124636 Mus muscu	AC139696 Homo sapi	AL954353 Mouse DNA	AC147571 Pan trogl	AL626775 Mouse DNA				~	Н	N	_	8 Plasn	4 Homo	3 Ношо	9 Plasn	7		AC108226 Rattus no	375	AC110159 Mus muscu	
AB060908	AK126682	CO841482	AK124520	AC074365	AL606804	BC030506	AF521911	AY212246	CO733169	AX740457			AK125521	AC128688	AC024964	AC110870	PFMAL3P5	AC108574	AC104910	AC124636	AC139696	0 AL954353	AC147571	0 AL626775	AL713872	AC068147	AC005801	AC009603	AC121231	BD136402	AC092331	AC004688	AC116364	AC069163	AC004709	AE014847	AC120746	AC108226	0 AL837509	AC110159	
S.F		w	4136 9	41268	185467 9	1532					543 10	Н								88119		٦	171079 2	Н		7	1984	5573	8797	~	53	4			96149	52650	38748	44341	56698 1	5340	
88.7	81.7	81.3		60.1										17.6	9.	9	7		m		9	٦.	m	4.0	4	m.		13.8	13.8	θ.	13.6	m	3	ω,	13.6	13.6	۳,		13.5		
634	584	581	581	430	430	169.5	· w	· vc	166.5	,	128	128	126	126	126	126	112	110.5	109.5	109.5	104.5	102.5	102	100	100	99.5	98.5	98.5	98.5	96	97.5	97.5	97.5	97.5	97.5	97.5	64	97	96.5	96.5	
S	9	7	· cc	o o	-	11	12	E E	4.	. <del>.</del>	1.0	17			20	21	22	23	24	25	26	c 27		60	30		c 32				36	37		39		41	42	4.3	44	45	

				BC024174		•		Homo sapiens	
RESULT 1	BC0241/4	LOCUS	DEFINITION	ACCESSION	VERSION	KEYWORDS	SOURCE	ORGANISM	

2648 bp mRNA linear PRI 01-APR-2004 LOC148823, mRNA (cDNA clone IMAGE:4109064).

ALIGNMENTS

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. 31:18848218 (human)

Straubberg, L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Straubberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shemen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N. K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Haish, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, F.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Wuzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, B., Ketteman, M., Madan, A., Rodrigues, S.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., REFERENCE AUTHORS

us-10-005-907-2.rst

```
110 TyrhlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                 31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal 50
        876
37
28
39
       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                   Search completed: November 19, 2004, 03:36:44 Job time : 2710 secs
                                                  US-10-005-907-2 (1-135) x BQ214406 (1-876)
                                                                                                                                                                                                  129 TyrGluValValPheProHis 135
                                                                                                                                                                                                           1.11e-07
156.50
60.75$
34.58$
21.89$
                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
Alignment Scores:
Pred. No.:
             Score:
                                                                 ò
                                                                           q
                                                                                         à
                                                                                                   qq
                                                                                                                8 6
                                                                                                                                             රු සි රු
                                                                                                                                                                                  역
장 역
```

233

89

20

7.0

```
| 1.876 | Arganisms | Arganism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BQ214406 876 bp mRNA linear EST 02-MAY-2002 AGENCOURT 7592611 NIH_MGC_92 Homo sapiens cDNA clone IMAGE:6070069 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90 GluAsnIleAspSerLeuThrArgLysValArqGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    110 TyralaleuleuargThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294 TATTCACTÍCTÁCATATGCCTTCTACAGACCCCAGGCATGCCCGATCCCCAGAAGATGAA 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryorgan, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1. (bases 1 to 876)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                  |||||||::
234 GAGAATGTTCCCTGCAAAGCTGAAAGACCCAGAGAGTCCTTGGGAGGAACTGAGACTGAG
                                                                                                                                                                                                                                                              GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71 ValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlYTYr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrange by: The I.M.A.G.E. Consortium
CLOMA Library Arrange by: The I.M.A.G.E. Consortium
Clone distribution: MGC clone distribution information
Clone distribution: MGC clone distribution
Clone distri
339
    Conservative:
                                Mismatches:
                                                                            Indels:
                                                                                                                                                                                         US-10-005-907-2 (1-135) x AW963366 (1-683)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129 TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BQ214406.1 GI:20395806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
60.75%
34.58%
21.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                        51
                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BQ214406
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AWYB53166 683 bp mRNA linear EST 01-JUN-2000
EST375439 MAGE resequences, MAGH Homo sapiens CDNA, mRNA sequence.
AW963366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90 GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 683)
2 (bases 1 to 683)
3 (bases 1 to 683)
4 (bases 1 to 683)
6 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116 AAAAAATACTCATTTTTGAAAAGAGG---CAAGATTCCCAAAAAGAAATGAAAGAATG 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233 CTCATCAATCATCGGGTTCTCTGTACAAGGCCATCAGGGAACTCTGCTGAAGAGTACTAT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     110 TyrAlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray Unpublished (2000)

Unpublished (2000)

Ontact: John Quackenbush

The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Fal: 301 838 3528

Fax: 301 838 0208

Email: johnq@tigr.org
Plate: 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70
                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71 ValileAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      683
                                                                                                508
37
39
39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAGH"
                                                                                                    Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"

Ab Xref="taxon:9606"

(clone lib="MAGE resequences, note="Vector: pBluescriptSKm"
                                                                                                                                                                                                                      Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .683
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x AY404586 (1-508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AW963366.1 GI:8153202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.08e-08
156.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seq primer: Reverse
                                                                                                         51e-08
                                                                                                                                         156.50
60.75%
34.58%
21.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                        Alignment Scores:
Pred, No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
AW963366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ਨੇ
```

рe

α

g ð d ò d ò Db ò g ò Dp à

```
<1. .>508
                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY404586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14671302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               919
                                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AY404586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homos asparens

BURATYOTA SAFE STATE STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM455407

1085 bp mRNA linear EST 05-FEB-2002

ENT. 1 6407334 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5500391
                                  ||||
|CCTTGGAATGTGAGAATGCAAAGGCCCAAACAGAGAACATCCAGATGCTGGGATCACAT 184
                                                                                                                                                                                                                                                    |||||||
242 CAAGATTCCCAAAAAGGAAAAGAATGAAAGAATGATCTACTCCCATCCAGGACAATGTTGAC 301
                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362 CCATCAGGGAACTCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCC 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100 ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                --GlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                          79
                                                                                                                                                                                                                                                                                                                                                                                                                                   80 SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="IMAGE:5500391"
/tissue_type="lymphoma, cell line"
/lab host="DHIOB (phage-resistant)"
/clone_lib="NHI MGC 85"
/note="Organ: lymph; Vector: pCWV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for full-length clones and constructed by Life Technologies.
                                                                                                                                                                                                                                                                                                                                                           185 ATCGCTGAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---
                                                                                                                                                                                                                 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                         GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120 ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM455407.1 GI:18504436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5', mRNA Sequence.
BM455407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            i. .1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                   125
                                                                                                          31
                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
BM455407
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
```

Alignment Scores:

FEATURES

```
GSS 16-DEC-2003
                                                                                                                                                                                                                                                                                                                                                   555
                                                                                                                                                                                                                                                                                                                                                                                                                   GluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        110 TyralaleuleuArgThrSerValSerArgProCysSerCys---ThrHisGluHisAsp 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTCACTTCTACATAGCCTTCTACAGACCCCAGGCATGCCCGGATCCCCAGAGATGAA 735
                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                    71 VallleAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyr 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

(Dases 1 to 508)

Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.

Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                      51 SerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                    31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering them based on alignment.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M. A., Tanenbaum, D. M., Civello, D. R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Direct Submission

Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       508 bp DNA linear GSS 16-DEC VIRTUAL TRANSCRIPT, partial sequence,
       1085
37
28
39
3
                          Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene trios
Science 302 (5652), 1960-1963 (2003)
                                                                                                 Indels:
       Length:
                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                 (1-1085)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /gene="GCET2"
/locus_tag="HCM1940"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             129 TyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||||||||
TATGAACTICTCATGCCTCAC 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens GCET2 gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genomic survey sequence
                                                                                                                                                          US-10-005-907-2 (1-135) x BM455407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AY404586
AY404586.1 GI:39760563
6.55e-08
159.50
60.75%
34.58%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

```
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1193)

25 MHT-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Tissue Procurement: Lou Staudt

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Lou Staudt

CONTA Library Preparation: Life Technologies, Inc.

CONTACT: Robert Strausberg, Ph.D.

Historia Library Preparation: Life Technologies, Inc.

CONTACT: Robert Strausberg, Ph.D.

Figure Library Preparation: Life Technologies, Inc.

CONTACT: Robert Strausberg, Ph.D.

Listual Library Preparation: Life Technologies, Inc.

CONTACT: Robert Strausberg, Ph.D.

Listual Library Preparation: Library Ph.D.

Listual Library Ph.D.

Listual Library Ph.D.

Listual Library Ph.D.

Listual Library Ph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /uganish= none Sapisas
/mol type="mixNa"
/db Xref="taxon:9606"
/clone="iMAGE:S500141"
/lab_host="lymphoma, cell line"
/lab_host="DH10B (phage-resistant)"
/clone line="NIH_MGC 85"
/note="Organ: lymph; Vector: pCMV-SPORT6; Site_1: Not1;
/note="Organ: lymph; Vector: pCMV-SPORT6; Site_1: Not1;
/site_2: Sal1; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1193 bp mRNA linear EST 05-FEB-2002 AGENCOURT 6405645 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5500141 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 ATGGGAAATTCTCTGCTGAGAGAAAACAGTTTCAGGCGGCAGCAGAACACTCAAGAGATG 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                                                   432
   79
                                                                                                                        SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal
                                                                                                                                                                                                                                                ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg
                                  61 GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
                                                                                                                                                                                                                                                                                                                                                                     120 ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                           1193
448
34
52
23
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x BM455198 (1-1193)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BM455198.1 GI:18504238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.12e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166.50
52.23%
30.57%
23.29%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scores:
                                                                                                                                                                                                                                                                100
                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
BM455198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                           à
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazca; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazca; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 1070)
In (Dases) 1 to 1070)
In Mational Institutes of Health, Mammalian Gene Collection (MGC)
In Oppublished (1999)
In Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remant: Lou Staudt
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remant: Lou Staudt
CONT Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Liki at:
http://image.llnl.gov
Plate: LiAMA12124 row: h column: 22
High quality sequence stop: 648.

Ice | Location/Qualifiers |
Location/Qualifiers |
Location/Qualifiers |
Location/Qualifiers |
Location/Countiers |
Locati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGENCOURT 6409034 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:54962615', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          136 ATGGGAAATTCTCTGCTGAGAAAAACAGTTTCAGGCGGCAGCAGAACACTCAAGAGATG 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----GlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256 ATCGCTGAAGGGTGTTTCTGCCTTCCATGGAAAAAAATACTCATTTTTGAAAAAAGGG---
                  ProCysSerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                            ---LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x BM456595 (1-1070)
                                                                                                                                                                                                                                                                                                                                        BM456595.1 GI:18505635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9.76e-09
166.50
52.23%
30.57%
23.29%
                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pro----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                       BM456595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
```

원 ð

à

us-10-005-907-2.rst

```
Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                      source
                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .. NO. .
                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \stackrel{>}{\circ}
                                                                       Submitted (20-JUL-2004) Genoscope - Centre National de Sequencage :

PP 191 91006 EVRY cedex - FRANCE (E-mail : Begref@genoscope.cns.fr

PB 2 : www.genoscope.cns.fr)

181 strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1000 bp mRNA linear EST 12-MAR-2002
-6692745 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:5499556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 ATGGGAAATTCTCTGCTGAGAGAAAACAGGCGGCAGCAGAACACTCAAGAGATGCCTTGG 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175 AATGTGAGAATGCAAAGCCCCCAAACAGAGAACATCCAGAATGCTGGGATCACCATATCGCT 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292 TCCCAAAAACGAAAAATGAAAGAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        412 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           472 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       532 CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC 576
                                                                                                                                                                                                                                          /mol type="mkNa"
/db xref="taxon 9606"
/db xref="taxon 9606"
/clone="CSODG007YD15"
/tissue type="B cells (Ramos cell line)"
/plasmid="pcMVSPORT_6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----LysLysGlyAsnProAspGluGluArgLysArg----
                                                                                                                                                                                                                                                                                                                                                                       1566
47
33
34
54
51
                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-1566)
                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGENCOURT 6692745 NIH MGG
5', mRNA sequence.
BM904106
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x CR625820
                                                                                                                                                                                    division of Invitrogen
                                                                                                                                                                                                                                                                                                                                                                  7.12e-09
169.50
51.61%
30.32%
23.71%
                                 (bases 1 to 1566)
                                             Genoscope
Direct Submission
                                                                                                                                                                                                             1. .1566
                    Faraday Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31 -----
                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM904106
                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                  source
                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                    Pred. No.:
                               REFERENCE
                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                  FEATURES
                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM904106
                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
111 ATGGGAAATTCTCTGCTGAGAGAAACAGTTTCAGGCGGCAGCAGAACACTCAAGAGATG 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230
            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||||||
28B CAAGATTCCCAAAACGAAATGAAAGAATGTCATCTACTCCCATCCAGGACAATGTTGAC 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGlu-----AsnGlnLysLys 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----GlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171 CCTTGGAATGTGAGAATGCAAAGCCCCAAACAGAGAACATCCAGATGCTGGGATCACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              231 ATCGCTGAAGGGTGTTTCTGCCTTCCATGGAAAAAAAATACTCATTTTTGAAAAGAGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |||| :::||| :::||| ::::: |||||||||||:::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100 ArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GlySerGlySerGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal
         Sukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pro-----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                               1000
48
34
52
23
6
                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            x BM904106 (1-1000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31 ------
                                                                                                                                                                                                                                                                                                                                                                                               8.95e-09
                                                                                                                                                                                                                                                                                                                                                                                                       166.50
52.23%
30.57%
23.29%
                                                                                                                                                                                                                 1. .1000
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
```

organism="Homo sapiens"

/mol\_type="mRNA" /db\_xref="taxon:9606"

```
Percent Similarity:
                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                  31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    295
                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
CR625820
                                                                                                                                     ORIGIN
                                                                                                                                                                                  Pred.
                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

I (bases) 1 to 1124)

S NIH-MGC http://mgc.nci.nih.gov/.

I Unpublished (1999)

L Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Louis Staudt, M.D., Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed By: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1124 bp mRNA linear EST 12-JAN-2001
Homo sapiens cDNA clone IMAGE:4342719 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                      340 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100 TCCTTGGGAGGAACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCAGG 459
                                                                                                                                                                                                                                                                                                                                                                                            82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLy8ValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgFroCys 121
                                                                                                                                                                  43 ATGGGAAATTCTCTGCTGAGAGAAAACAGGGGGGGGGAGCAGCAGCACCTCAAGAGATGCCTTGG 102
                                                                                                                                                                                                                              162
                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                         42
                                                                                                                                        19
                                                                                                                                                                                                                                                                          163 GAAGGGIGITICIGCCIICCAIGGAAAAAAIACICAITIIIGAAAAAAAGG---CAAGAI
                                                                                                                                                                                                                                                                                                                                  220 TCCCAAAAGAAAAGAAAGATGTCATCTCCCATCCAGGACAATGTTGACCAGACC
                                                                                                                                                                                                                                                                                                                                                                          63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                    43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                         ------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                       MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460 CAIGCCCGAICCCCCAGAAGAIGAATAIGAACTICTCAIGCCTCAC 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAM9958 row: h column: 16
High quality sequence stop: 715.
Location/Qualifiers
1. .1124
         1095
47
33
54
21
5
                                                                                                                                                                                                  20 ----LysLysGlyAsnProAspGluGluArgLysArg--
         Length:
Matches:
Conservative:
                                                     Mismatches:
                                                                     Indels:
                                                                                   Gaps:
                                                                                                             x BG106563 (1-1095)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BF795688
BF795688.1 GI:12100659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          602259560F1 NIH_MGC_85
mRNA_sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
         4.49e-09
                         169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                               US-10-005-907-2 (1-135)
                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BF795688
Scores:
                                                                                                                                                                                                                                                               31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
BF795688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
 Alignment
                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                          g
                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                               ò
```

```
CR625820 1566 bp mRNA linear HTC 21-JUL-2004 full-length cDNA clone CS0DG007XD15 of B cells (Ramos cell line) of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human).

CR625820.

CR658820.1 G1:50506627

HTC: CNSLT CDNA.

Homo sapiens (human)

Homo sapiens (human)

Homo sapiens (human)

Homo sapiens (human)

Mammalia; Eutheria; Primates; Catarthini; Hominidae; Homo.

I (bases 1 to 1566)

Li, W.B., Gruber, C., Jessee, J., and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (1900)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               178 AATGTGAGAATGCAAAGCCCCAAACAGAGAACATCCAGATGCTGGGATCACCATATCGCT 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                    19
/close="IMAGE:4342719"
/tissue_type="lymphoma, cell line"
/tissue_type="lymphoma, cell line"
/lab_most="DH10B (phage-resistant)"
/clone_lib="NHH MGC 85"
/note="Organ: lymph; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ::::::: |||||||
238 GAAGGIGTITCTGCCTTCCATGGAAAAAAAAATACTCATTTTGAAAAGAGG----CAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact : Feng Liang Email : fliang@lifetech.com URL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1124
47
33
34
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                      Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                  Length:
Matches:
                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                    (1-1124)
                                                                                                                                                                                                                                                                                                                                                                    x BF795688
                                                                                                                                                                                                                                    4.64e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                Best Local Similarity:
```

42

81

셤 ò dd à 임 ઠ g ò

```
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Cabase 1 to 1095)
NH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: Gapbs-r@mail.nih.gov
Tissue Procurement: Louis Staudt, M.D., Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC Clone distribution information can be http://mage.llnl.gov
Plate: LLAM.0066 row; a column: 19
                                                     81 Aridddhaarrcrcrdcrdadaaaaacagccagcagcagcagcacacrchagaagargccrrgg 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BG106563 1095 bp mRNA linear EST 30-JAN-2001
602290373F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:4385178 5',
                                                                                                                                        141 AATGTGAGAATGCAAAGCCCCAAACAGGAACATCCAGATGCTGGGATCACCATATGGCT 200
                                                                                                                                                                                                             201 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 257
                                                                                                                                                                                                                                                                                                  258 TCCCAAAAGGAAAATGAAAGAATGTCTACTCCCATCCAGGACAATGTTGACCAGACC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCCAGAGAG 437
                                                                                                                                                                                                                                                                                                                                                                                     318 TACTCAGAGGAGCTGTGCTATACCCTCATCAATCATCGGGTTCTCTGTACAAGGCCATCA 377
                                                                                                                                                                                                                                                                                                                                                                                                                                             82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        438 rcctrgggaggaacrgagacrgagrafrcacrrchacarargccrrcracagaccccagg 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="lymphoma, cell line"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH MGC 85"
/note="Grgan: lymph; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for
full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                  -----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                       43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
               MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                        63 GlyserGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                -----LysLysGlyAsnProAspGluGluArgLysArg-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 641.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'clone="IMAGE:4385178"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG106563
BG106563.1 GI:12600409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA sequence.
                                                                                                                                                                                     31 -----
                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG106563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                            셤
                                                                                                                                   a
                                                                                     \delta
                                                                                                                                                                                  à
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BM479887
AGENCOURT_6464830 NIH_MGC_92 Homo sapiens CDNA clone IMAGE:5577364
                             273 TCCCAAAAACGAAAATGAAAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 332
                                                                                                                                                                   82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 62
                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates; Catarrhini, Hominidae, Homo.

1 (bases 1 to 1039)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                   453 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCAGG
                                                                                  63 GlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSerSer
                                                                                                           102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
Phttp://image.llnl.gov
Plate: LLAMI2330 row: 1 column: 05
High quality Sequence stop: 665.
                                                                                                                                                                                                                                                                                                                                           SerCys --- ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                        513 CATGCCCGATCCCCAGAAGATGAAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1039
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           x BM479887 (1-1039)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BM479887.1 GI:18528929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.19e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . .1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
```

FEATURES

DRIGIN

Score:

KEYWORDS SOURCE

RESULT 5 BM479887

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eu (Dasses 1 to 924)

NIH-MGC http://mgc.nci.nih.gov/.

L Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: MRC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence stop: 726.

High quality sequence stop: 726.
                                                                                                                                                                                                                                                                                                                                                     BG389415
602414106F1 NIH_MGC_92 Homo sapiens cDNA clone IMAGE:4522512 5',
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216 GAAGGGTGTTTCTGCCTTCCATGGAAAAAATACTCATTTTTGAAAAAGAGG---CAAGAT 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue type="embryonal carcinoma, cell line"
/lab_host="DHIOB (phage-resistant)"
/clone_lib="NHIOB (pc. 92"
/clone_lib="NHE MGC 92"
/note="Organ: testis, Vector: pcWV-SPORT6, Site_1: Not1;
Site_2: Sall; Cloned unidirectionally, oligo-dT primed.
Average insert size 2.5 kb Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
102 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  156 AATGTGAGAATGCAAAGCCCCAAACAGAGAACATCCAGATGCTGGGATCACCATATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                        SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                       CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           924
47
33
54
51
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----LysLysGlyAsnProAspGluGluArgLysArg-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="IMAGE:4525512"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x BG389415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BG389415.1 GI:13282861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.6e-09
169.50
51.61%
30.32%
23.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG389415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31
                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                   BG389415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \dot{\delta}
                                                                                    엄
                                                                                                                                                             ò
                                                                                                                                                                                                                               d
                                                                                                                                                                                                                        Figurination detection retinates; Constitution of the property of the property
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /crganism="Homo sapiens"
/organism="Homo sapiens"
/mol type="MRNA"
/db xrefe="taxon:9606"
/clone="CSODG007YD15"
/tissue type="B CELLS (RAMOS CELL LINE)"
/cell line="RAMOS CELL LINE"
/clone lib="Homo sapiens B CELLS (RAMOS CELL LINE)"
/colone lib="town sprime"
/clone lib="town sprime"
/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      292 TCCCAAAAAGAAAATGAAAATGTCATCTACTTCCAGGACAATGTTGACCAGACC 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115 ATGGGAAATTCTCTGCTGAGAAAACAGGCGGCAGCAGAACACTCAAGAGATGCCTTGG 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                           Homo sapiens
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175 AATGTGAGAATGCAAAGCCCCAAACAGAAACATCCAGATGCTGGGATCACCATATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlyserGluGluValCysTyrThrValIleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           was not normalized. Library was combined of Invitrogen.

division of Invitrogen.

This sequence belongs to sequence cluster 1964.r

For more information about this cluster, see

http://www.genosope.cms.fr/cdna?s=CSODG007CB08QP1&c=1964.r.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917
47
33
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-917)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x AL560376
                                 GI:46185747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.57e-09
169.50
51.61%
30.32%
23.71%
                                                                                                   sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . No. :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local
                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
```

30

19

g

셤 ò

ò 셤 ò g ò a

ò

```
EST 02-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      223 GAAGGGTGTTTCTGCCTTCCATGGAAAAAAAACTCATTTTTGAAAAGAGG---CAAGAT 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280 TCCCAAAACAAAAATGAAAGTCATCTACTCCATCCAGGACAATGTTGACCAGACC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGGAAATTCTCTGCTGAGAGAAACAGGCGGCAGCAGAGAACACTCAAGAGATGCCTTGG 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340 TACTCAGAGGAGCTGTGCTATACCTCATCAATCATCGGGTTCTCTGTACAAGGCCATCA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82 LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .02 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                                                                                                                                                  /clone=IMAGE:4340323"
/tissue type="lymphoma, cell line"
/lab_host="DHIOB (phage-resistant)"
/clone line="NHH MGC 85"
/note="Organ: lymph; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sall; Cloned unidirectionally; oligo-dT primed.
Average insert size 1.867 kb. Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AL560376

917 bp mRNA linear EST 02-APR-200
AL560376 Homo sapiens B CELLS (RAMOS CELL LINE) Homo sapiens cDNA
AL560376
AL560376
                                                                                                       þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GlnGluMetThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 GlySerGluGluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 GGGAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG
            Tissue Procurement: Louis Staudt, M.D., Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can l

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov.

Plate: LLAM952 row: d column: 20

High quality sequence stop: 687.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520 CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1045
48
32
54
21
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                           1. .1045
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-005-907-2 (1-135) x BF797507 (1-1045)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.44e-09
173.50
51.61%
30.97%
24.27%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . No. :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
AL560376
                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
/tissue_type="from acute myelogenous leukemia"
/lab host="MID10B (T1 phage-resistant)"
/clone lib="NIH_MGC_55"
/clone lib="NIH_MGC_55"
/note="Organ: bone marrow; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggccgcctcggcc); Site_2: Sfil
(ggccattatggcc); Double-stranded cDNa was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 5'-ATTCTACAGGCCGACACAG-dT (30) BN-3' (where B = A, C, C, or G and N = A, C, G, or T). Average insert size 1.65 kb (range 0.9-4.0 kb). 14/15 colonies concained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  602257174F1 NIH_MGC_85 Homo Bapiens cDNA linear EST 12-JAN-2001
mRNA sequence.
BF797507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerieuSerSerAsnAspAspGlyTyrGluAsnIleAspSerieuThrArglysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105 AAAGGAAACCCAGATGAGGAAAGAAACGGCAGGAAATGACTACATTTGAAAAGAAACTT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAGATCC 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryoria, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 1045)
NIH-MGC http://mgc.nci.nih.gov/.
NIA-ional Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysSerCysThrHisGluHisAspTyrGluValValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    527
135
0
0
0
0
                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-527)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-005-907-2 (1-135) x BF242113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BF797507.1 GI:12102561
                                                                                                                                                                                                                                                                          clones and v
Alto, CA) "
                                                                                                                                                                                                                                                                                                                                                                             78e-73
                                                                                                                                                                                                                                                                                                                                                                                              715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                          Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                       Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
BF797507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
```

à g ò g ò G δ g ò g 459

42

62

g ò

₽

CMD36\_D01 uu88h07.y AGENCOURT

AGENCOURT EST181808

AGENCOURT AGENCOURT

Homo sapi EST375439

uv07d02.y uv06d06.y BB629482

BM455198 A

M455407 A

M455407 A

M963366 B

BQ214406 B

BQ214803 B

BM5933 B

BM5933 B

BM5933 B

BM5923 B

BM75241 B

BG276802 B

BG276802 B

BG32084 B

BG3684 B

BG37686 B

BG37688 B

BM477520 A

BM477520

uu69e05.y

Mus muscu

LL2in1317 AGENCOURT

```
BM459235
AA311038
CB286394
BG149093
CB320849
                                                                                                BQ214406
BG024891
BM458339
                                                                                                                                                                                                                                                              BG145241
BG276802
                                                                                                                                                                                                                                                                                                                         BB629482
AK036553
                                                                                                                                                                                                                                                                                                                                                               BU696543
BU932945
                                                                                                                                                                                                                                                                                                                                                                                                       BX390865
BG176880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BG276071
AW519547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AY404588
BF797042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BX391573
AW480906
                                                          AY404586
AW963366
                                                                                                                                                                                                                                                                                                        3G276546
                                                                                                                                                                                                                                                                                                                                                                                                                                                 30429114
                       BM455198
                                          BM455407
10093
10093
10093
10093
1110041
10040
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
10090
1009
                                                                                                                                                                                                                                                                                                                                                                                                                                               479
539
538
1015
1527
502
591
                                                                                                                                                                                                                                                                                                                                                                                      116.6
116.3
115.7
115.3
115.1
114.8
114.6
114.5
114.5
                                                                                                                                                                                                                                                                                                                                                                                      118.5
118
116.5
                                                                                                                                                                                                                                                                                                                                                                                                                                               112
110.5
109.5
108
105.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104
103.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102.5
101.5
101.5
100.5
    166.5
1166.5
1156.5
1156.5
1156.5
1156.5
1145
1145
1128
1128
1128
1127
1127
1127
1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               102.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
BF242113
      υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Command line parameters:
-MODBL=frame+ p2n.model - 1bVexlh
-Q=/Cqn2_1/USPTO_spool/US10005907/runat_16112004_140457_6176/app_query.fasta_1.327
-Q=/Cqn2_1/USPTO_spool/US10005907/runat_16112004_140457_6176/app_query.fasta_1.327
-DB=EST -QFWT=fastap - SUFFIX=rst -MINMATCH=0.1 - LCOPCL=0 - LOOPEXT=0
-UNITS=bits -START=1 - END=-1 - MATRIX=blosum62 - TRANS=bluman40 - Cdi - LIST=45
-UNITS=bits -START=1 - END=-1 - MATRIX=blosum62 - TRANS=bluman40 - Cdi - LIST=45
-UNITS=bits - START=1 - FRAPETER=50 - WININEN - MAXLEN=20000000
-USER=US10005907 @CGN 1 1 3437 @runat_16112004 140457_6176 - NCPU=6 - ICPU=3
-NON MANAP - LARGEQGERS - NRG SCORES=0 - WAIT - DSPBLOCK=100 - LONGLOG
- LONGLOG=- FGAPEXT=0.5 - PELOP=6 - DELEXT=7 - XGAPEXT=0.5 - FGAPOP=6
                                                                                                                                            2004, 01:11:39; Search time 2705 Seconds (without alignments) 1818.619 Million cell updates/sec
                                                                                                                                                                                                                                                                    1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                           GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                           using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                  32822875 segs, 18219865908 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                               Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                 US-10-005-907-2
715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9b est1::
9b est2::
9b btc::
9b est4::
9b est4::
9b est6::
9b est6::
                                                                                                           nucleic search,
                                                                                                                                                     November 19,
                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of
                                                                                                                                                                                                                                                        Perfect score:
                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                               OM protein
                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
                                                                                                                                                       Run on:
```

## ALIGNMENTS

tigr-gss-RPCI-24-3

33516 MAR Pan trogl

BX391573

BF797042 BG177483 CK397921 BX391573 AW480906 CE686854 BH085248

602314133 AGENCOURT

uu89g10.y up35b07.y

AGENCOURT

602313443 UI-HF-BN0

BX390865

Pan trogl Mus muscu

602258082

_	CTT713	
	LOCUS	BF242113 527 bp mRNA linear EST 14-NOV-2000
	DEFINITION	601880401F1 NIH MGC_55 Homo sapiens CDNA clone IMAGE:4109064 5',
_		mRNA sequence.
	ACCESSION	BF242113
_	VERSION	BF242113.1 GI:11156040
	KEYWORDS	BST.
	SOURCE	Homo sapiens (human)
_	ORGANISM	Homo sapiens
		Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
		Mammalia; Eutheria; Primates; Catarrhin; Hominidae; Homo.
	REFERENCE	1 (bases 1 to 527)
	AUTHORS	NIH-MGC http://mgc.nci.nih.gov/.
	TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)
_	JOURNAL	Unpublished (1999)
	COMMENT	Contact: Robert Strausberg, Ph.D.
		Email: cqapbs-r@mail.nih.gov
_		Tissue Procurement: ATCC
_		cDNA Library Preparation: CLONETECH Laboratories, Inc.
-		CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
		DNA Sequencing by: Incyte Genomics, Inc.
		Clone distribution: MGC clone distribution information can be
		found through the I.M.A.G.E. Consortium/LLNL at:
-		http://image.llnl.gov
		Plate: LLCM993 row: a column: 01
		High quality sequence stop: 518.
	FEATURES	Location/Qualifiers
-	sontce	•
		_
_		/mol type="mRNA"
		/db_xref="taxon:9606"
_		/clone="lMAGE:4109064"

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

BF242113 601880401 BF797507 602257174 AL560376 AL560376 BG389415 602414106 BM479887 AGENCOURT BG106563 602290373 BF795688 602299560 CR625820 full-leng

AL560376 BG389415 BM479887

BF242113 BF797507

Query Match Length DB

Score

Result δ. BF795688 CR625820 BM904106

BG106563

527 1045 917 924 1039 1095 1124 1000

100.0 24.3 23.7 23.7 23.7 23.7 23.7 23.7 23.7

173.5 169.5 169.5 169.5 169.5 169.5 169.5

2 5 4 5 9 7 8 9

Description

```
GAGGAGCÁGGAGCAGGAGGAGGAGGAGGAGGAGCTGCAACGCCGAGCGGAGGGC 196
                                                                                                                                                                                                                                                                                                                           197 AGGAACCGGAGCGCGAGCAGTAGCTGGGTGGGCACCATGGCTGGGATCACCACCATCGAG 256
                                                                                                                                                                                                                                                                                                                                                                                            93 AspSerieuThrArgLysVal-----ArgGlnPheArgGluArgSerGluThrGlu 109
                                                                                                                                                                                                                                                                                                                                                                                                          ::: ||| |||:::||| |||
317 GAGCGCCTCCAGCGAGAAGTTGAGGGAGAAAAGGCGGGGAGAACAGGCTGAGGCTGAG
                                                                                                                                                                 14 GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                     GAGGAGCAGGAGCAGCAGGAGCAGGAGCAGGAGCAGGAGCAGGAGCAGGAGCAG
                                                                                                                                                                                                                     53
                                                                                                                                                                                                                                                                 68
                                                                                                                                                                                                                                                                                                             73
                                                                                                                                                                                                                                                                                                                                                 HislleProHisGlnArgSerSerLeuSerSerAsn---AspAspGlyTyrGluAsn1le 92
                                                                                                                                                                                                              34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                             --TyrThrVallleAsn
                                                                                                                                                                                                                                                                                                                                                                      257 GCGGTGAAGCGCAAGATCCAGGTTCTGCAGCAGGCAGATGATGCAGAGGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           melanogaster genomic polynucleotide SEQ ID NO 33958.
                                 545 A; 568 C; 785 G; 403 T; 0 U; 0 Other;
hyperproliferative disorders, neurodegenerative disorders, cardiomyopathies, viral infections and metabolic disorders
                                                                                                                                                                                                                                                         SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCys-
                                                                      2301
29
24
51
24
3
                                                                  Length:
Matches:
Conservative:
Mismatches:
                                                                                                                 Indels:
                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EX.
                                                                                                                                                 (1-2301)
                                                                                                                                                                                                                                                                                                                                                                                                                                        TyrAlaLeuLeuArgThrSerVal 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGCCTCCTTGAACCGTAGGATC 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Myers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                x AAA09303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PWD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABL27495 standard; DNA; 1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0191637P
2000US-00614150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-2001; 2001WO-US009231
                                                                  0.427
96.00
41.41%
22.66%
13.43%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila; developmental pharmaceutical; gene; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adams M,
                                 BP;
                                                                                                                                            US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-656860/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORP NY.
                                                                                                   Similarity
                                                                                       Percent Similarity:
                                Sequence 2301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200171042-A2
                                                       Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-MAR-2000;
11-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PEKE ) PE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Venter JC,
                                                                                                                                                                                         17
                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                                               137
                                                                                                                                                                                                                                                                                                                                                  74
                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                         110
                                                                                                                                                                                                                                                                                                                                                                                                                                                               377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABL27495
                                                                                                            Query Match:
                                                                  No.:
                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                  ઠ
                                                                                                                                                                                      g
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
```

```
GCGGCGTACCAGAACTACGTCAGCTGGATGATAAGCAGCAAGAGCTAATCACCGAT 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1359
                                                                                                                        1.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGCGCGGGAATGGCAAAGATTTGGGCGATACACGGCCAGCGTGATGCGGCAAGAGGTG 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1180 AATGCGCTGTGCGCCGGTTGCGGAGCAGCACTAGGAATGCGCTTCGAGATGAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91 AsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyr 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90
                                                                                         The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABBS7737-ABR7072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 detection reagent for detecting 1000 or more for elucidating cell signaling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AsnTyrLeuleuArgLysLeuSerCys---LeuGlyGluAsnGlnLysLysProLysLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCAGGAGTTGCGGGATCTGTGCTGCTTCCTGGACGACGACGGCGGAGAAGGGACGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||||||
1240 GGTTCCAGCTCCAGCACAAGGAACTAGAGACATCACCGCCTTGAGGAACTATGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----GlyAsnProAspGluGluArgLysArgGlnGluMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1120 AATCTAGAGCTCAAGGAGCTCTGCCTCTACTTGGACGAGGGAGCGTGCCCATGTGGGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----SerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -GluValCysTyrThrValIleAsnHisIleProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----SerLeuSerSerAsnAspAspGlyTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1300 cadodecaactaccccaggatctacgtcatgcccacacgctcaacgcctacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal-
                                                               NO 33958; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                             Sequence 1824 BP; 500 A; 591 C; 493 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    1824
36
25
51
52
5
                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Search completed: November 19, 2004, 01:51:20 Job time : 430 secs
                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-005-907-2 (1-135) x ABL27495 (1-1824)
New isolated nucleic acid
genes from Drosophila and
                                                                                                                                                                                                                                                                                                                               0.716
93.00
37.20%
21.95%
13.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111 AlaLeuLeuArg 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1420 GCCCATCTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78 GlnArgSer---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlySerGlu-
                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity:
Query Match:
DB:
                                                                 SEQ ID
                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                interactions.
                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                              Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
```

ò

```
99WO-US023314.
                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-00167206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VP,
                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nandabalan K, Schulz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-303742/26.
                                                                                                                                                                                                                                                                                          NIK1 Interacting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; AAY92331
                                                                                                                                                                                                                                                                                                                                                                                   WO200020448-A2
                                                                                                                                                                                                                                                                                                                                                                                                                           06-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-1998;
                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                 10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                      13-APR-2000
                                                                                                                                                                                                                                AAA09303;
                            69
                                                                                                                                                                                         RESULT 14
                                                                                                                                                                                                                     셤
                                                                                                                              임
                           ò
                                              Db
                                                                    à
                                                                                     g
                                                                                                           ò
                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents an oncogene from the present invention. The present invention describes a composition which comprises two antisense oligonucleotides. The first oligonucleotide is specific for a cytoplasmic oncogene or proto-oncogene selected from ras, raf, EGF-1, c-fins, c-ros, c-kit, c-met, c-trk, c-src, c-abl, bor-abl, c-fgr and c-yes. The second oligonucleotide is specific for a nuclear oncogene or proto-oncogene selected from myc, jun, c-ts, c-fos, c-myb, B-myb, c-rel, c-vay, C-ski, c-spi, cyclin D1, PML/RAR alpha, AML1/MTG8, E2A/prl and ALL-1/AF-4. The composition is used for treating cancer. The combination of antisense oligonucleotides has synergistically enhanced ability to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
CCGGGAGCAGCGTTCTCCAAAGTCAAATTAGACTGTTCTCTCTGAGCCTGTACTTCACCA 508
                                                                                                                                                           Human; oncogene; proto-oncogene; neoplastic disease; anticancer; cancer; antisense oligonuclectide; c-trk; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34 ThrThrPheGluArglysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                                                                      composition comprising two anti-sense oligo:nucleotide(s) cytoplasmic and nuclear oncogene(s).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 SerAsnGlnGluAsnGluAsnGlySerGlySerGluGluValCys-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              545 A; 568 C; 785 G; 403 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2301
29
24
51
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x AAV20445 (1-2301)
                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Col 99-102; 92pp; English.
                                                                                  DNA; 2301 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           growth of cancer cells
                                                                                                                                                                                                                                                                                              (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                                                                                                                                            94US-00306691.
                                                                                                                                                                                                                                                       94US-00306691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.427
96.00
41.41%
22.66%
13.43%
                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                  Ë
                                                                                                                                                                                                                                                                                                                  Calabretta B, Skorski
                                                                                                                                            Human c-trk oncogene
                                                                                                                                                                                                                                                                                                                                      WPI; 1998-229882/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                  AAV20445 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2301 BP;
                       uHis 127
                                           512
                                         GCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                         .5-SEP-1994;
                                                                                                                                                                                                                                                                            15-SEP-1994;
                                                                                                                          17-JUN-1998
                                                                                                                                                                                                                 US5734039-A
                                                                                                                                                                                                                                     31-MAR-1998
                                                                                                                                                                                                                                                                                                                                                           Anticancer
                                                                                                                                                                                                                                                                                                                                                                    targetting
                                                                                                       AAV20445;
    449
                        126
                                          509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inhibit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                RESULT
                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ኞ
```

```
AAA09303-09 were isolated in a modified yeast two hybrid system using NIK1 protein as "bait". These are known sequences which encode NIK1 interacting proteins. The invention concerns purified complaces of a NIK1 protein-interacting protein, where the interacting protein is chosen from TrKA, protein phosphatase lalpha, 14-3-3epsilon, alpha-tropomyosin, vimentin, p0071, Ini-1, IP-1, IP-2, IP-3, IP-4, or IP-5. NIK1 (also referred to as Nek2) is a human homologue of the Aspergillus nidulans microtic regulator, NIWA kinase. NIK1 is a serine/threonine-specific kinase and is thought to play a key role in cell-cycle events leading to the onset of mitosis. The complexes, their derivatives and NIK1 or NIK1-IP protein and DNA sequences, etc. are useful for treating or preventing a disease or disorder involving aberrant levels of the complex or protein. Such disorders include cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                          376
                                                                                                                                                                                                                                                                                      316
                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                           256
                                                                                                                                                                                                                92
                                                                         73
137 GAGGAGCÁGGÁGCAGGÁGGAGCAGGAGCÁGAGAGGÁGGCTGCAACGCCGAGCGGAGGAGG
                                                                                                                                           197 AGGAACCGGAGCGCGAGCAGTAGCTGGGTGGGCACCATGGCTGGGATCÀCCACÀTCGAG
                                                                                                                                                                                                                    74 HisIleProHisGlnArgSerSerLeuSerSerAsn---AspAspGlyTyrGluAsnIle
                                                                                                                                                                                                                                                                                      93 AspSerLeuThrArgLysVal-----ArgGlnPheArgGluArgSerGluThrGlu
                                                                                                                                                                                                                                                                                                                                                                                                    New complex of a NLK1 protein and a NLK1 protein-interacting protein, useful for treating cancer, hyperproliferative disorder, neurodegenerative disorder, cardiomyopathies, viral infections and metabolic disorders.
                                                                         ---TyrThrVallleAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein; Trk oncogene A; TrkA; protein complex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; antiviral; neuroprotective; cardiant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 126-130; 172pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                377 GTGGCCTCCTTGAACCGTAGGATC 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110 TyralaLeureuArgThrSerVal 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Trk oncogene A coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
233. .2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA09303 standard; DNA; 2301 BP
```

```
3457 ACAAAACAAGAAGGAGAGGAGGGGGGGGGCTGCGAAATT-----CAGCAAGCAGGG 3510
                                                                                                                                                                                                                                                                                                                                                                                                     CTAAAGCTAGAAGCGAGGGGGGGGACGACTAGAGAGAGACAA-----ACACATGCA 3624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---CATCGCTGGAGGATAGCGAAG 3672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125
                                                                                                                                                                                                                                                                                                                                                                                                                                     92 IleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAla 111
                                                                                                                                                                                                                          GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                                                                                                                                                               54 SerAsnGinGiuAsnGiuAsnGiySerGiySerGluGiuValCysTyrThrVallleAsn 73
                                                                                                                                                                                                                                                                                                                                                                                  74 HisIleProHisGlnArgSerSerLeu-----SerSerAsnAspAspGlyTyrGluAsn 91
acid sequences may be useful in diagnostic and screening applications. The current sequence is that of a human soft tissue sarcoma-upregulated DNA of the invention. The current sequence is not shown within the specification per se but was submitted in CD format by the inventor.
                                                                                                                                                                                                                                                                            34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluValSerSerThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rat; ds; gene; pain; neuronal tissue; gene therapy; spinal segmental nerve injury; chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
                                                               Sequence 3957 BP; 1055 A; 927 C; 969 G; 1005 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         112 LeuLeuArgThrSerValSerArgProCysSerCysThrHis----
                                                                                                           3957
35
21
54
20
5
                                                                                                                                  Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3673 CACAGTCCAACACACÁCGÁCACAGÁAGTC 3702
                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------GluHisAspTyrGluVal 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3625 CGGACGAGGTGGAGCGACACGAAACCC---
                                                                                                                                                                                                   x ADQ24942 (1-3957)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rat gene U02506, SEQ ID NO 7951.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-2001; 2001US-0312147P.
01-NOV-2001; 2001US-0346382P.
26-NOV-2001; 2001US-0333347P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-AUG-2002; 2002WO-US025765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE62022 standard; DNA; 584
                                                                                                       0.666
97.00
43.08%
26.92%
13.57%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GEN HOSPITAL CORP.
BAYER AG.
                                                                                                                                                                                                US-10-005-907-2 (1-135)
                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003016475-A2.
                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-FEB-2003
                                                                                                                                                                                                                            14
                                                                                                                                                                                                                                                                                                                                                                                                              3511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADE62022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GEHO ) (FARB ) I
                                                                                                                                                           Query Match:
                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE62023
 S X C C C C X S
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
```

```
The invention discloses a composition comprising two or more isolated rat or human polynucleotides or a polynucleotide which represents a fragment, derivative or allelic variation of the nucleic acid sequence. Also claimed are a vector comprising the novel polynucleotide, a host cell comprising the vector, a method for identifying a nucleotide sequence which is differentially regulated in an animal subjected to pain and a comprise the expression of the polynucleotide sequence that increases or decreases the expression of the polynucleotide sequence that is differentially expressed in neuronal tissue of a first animal cubjected to pain, a method for identifying a compound which regulates the expression of a polynucleotide sequence which is differentially expressed in an animal subjected to pain, a method for identifying a compound that regulates the activity of one or more of the compound that regulates the activity of one or more of the polynucleotides, a method for producing a pharmaceutical composition, a method for identifying a compound useful in treating pain and a pharmaceutical composition comprising the one or more of pain and a pharmaceutical composition comprising the one or more confound that regulates its activity is useful for preparing a medicament for treating pain and spared nerve injury (SNI) in an animal (e.g. gene conducted sequence presented is a rat DNA (shown in Table 2 of the specification) which is differentially expressed during pain. Note: The specification) but was obtained in electronic form directly from WIPO at the conduction in the conduct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New composition comprising two or more isolated polypeptides, useful for preparing a medicament for treating pain in an animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            70 ThrVallleAsnHisIleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyr 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 GlyGluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33 MetThrThrPheGluArgLy8LeuGlnAspGlnAspLy8Ly8SerGlnGluValSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------rccrrrccarcarragaccrcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53 ThrSer-----AsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 584 BP; 247 A; 75 C; 175 G; 87 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         584
32
25
53
12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
                         Costigan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (1-584)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344 TCTTTTCTGTCTCACCTT-----
                         ×
                                                                                                                                                                                                Claim 1; Page; 1017pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  x ADE62022
                       Befort
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96.50
46.72%
26.23%
13.50%
                                                               WPI; 2003-268312/26.
GENBANK; U02506.
                     D'urso D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                     Woolf C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                 New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
```

109

GluAsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu

90

8 8

TAAGAGCAAGATACTCTGACCTCTTAATTTGGAGATTTTGAGCAACAGGAAGAGACGGAG

110 TyrAlaLeuLeuArgThrSerValSerArgProCysSer--

448

---CysThr-HisGl 126

```
The invention relates to 592 new human secreted polypeptides useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, inflammatory accorders, or polypeptides comprising an amino acid sequence at least 55% identical to the new sequences. The polypeptides, antibodies or antibody fragments that bind to the polypeptides, nucleic acids encoding the polypeptides, agonists or antagonists that binds to the polypeptide, are useful in preparing diagnostic or pharmaceutical compositions for diagnosing, treating or preventing an e.g. immune compositions for disorders (e.g. inflammatory bowel disease, nephritis or Crohn's disease), respiratory disorders (e.g. asthma and allergy), cancers (e.g. gastric, ovarian or lung cancer), CNS disorders (e.g. parkinson's disease or Alzheimer's disease), and cardiovascular disorders (e.g. atherosclerosis or injury), neurodegenerative cardiovascular disorders (e.g. atherosclerosis or myocarditis). The cardiovascular samples, in forensic blooby, and as hybridization or antisense DNA or RNA, in gene expression through triple halix formation cor antisense DNA or RNA, in gene therapy, for identifying individuals crombs and the polypeptides are useful for as molecular weight markers on sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) corrections to proper antibodies, for testing biological activities, and so the proper account of the control or antisense antibodies, for testing biological activities, and as proper account of the control or antisense antibodies, for the control or antisense antibodies, for the control or account of the control or antisense antibodies, included the control or antisense antibodies, for the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treating or preventing neural disorders, immune system disorders, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, proliferative and/or cancerous diseases. This sequence corresponds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to a gene encoding one of the polypeptide of the invention. Note: The sequence data for this patent did form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New human secreted polypeptides and polynucleotides, useful for diagnosing, treating or preventing e.g. immune disorders, inflammatory conditions, respiratory disorders, cancers, CNS disorders, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     claim 21; SEQ ID NO 319; 1754pp; English
                                                                                                                                                                                                                                                   21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                    19-MAR-2002; 2002WO-US008278
                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neurodegenerative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-167512/16.
P-PSDB; ADA57026.
                                                                                WO2002102994-A2
                             Homo sapiens
                                                                                                                                           27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                Rosen CA,
```

Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other; 1892 36 21 21 62 30 Matches: Conservative: Mismatches: Indels: Length: 0,19 98.00 38.26% 24.16% Best Local Similarity: Percent Similarity: Alignment Scores:

Query Match:

US-10-005-907-2 (1-135) x ADA56130 (1-1892)

572

ઠ

LeuLeuArglysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24

soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human; 871 104 931 114 ||||::::||||||||:::
332 AATGAAATATATGATGAGAACTCCTACTGGAGAAAACCAAAAACCTGGCAGCAGCCTCCTGCAG 991 811 751 80 64 Early detection of soft tissue sarcoma comprises determining expression of a gene in a first soft tissue sample and a normal soft tissue sample and comparing the gene expression, also useful in treating soft tissue 25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp 44 872 CCTATGATAATGGAGGACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG 752 AAGGAGGGACGCTGTGTCTCAGCTGCAGACAGACTCAGAGCCCAAGTTTCACTCT 812 GAATCTCTATCTTCTAACCCTTCCTCTTTTGCTCCCCGGGTACGAGGTAGAGTTCTACT ----ArgSerGluThrGluTyrAlaLeuLeuArg 632 CAAGGAGTGGAGCACAGGCAGAGCCGACACAAGAACACAAGCAGGAAGAGGGGGCAGAAA 45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer -----ValCysTyrThrVallleAsnHislleProHisGlnArgSer -----GluasnileAspSerLeuThrArgLysValArgGlnPheArgGlu---Human soft tissue sarcoma-upregulated DNA - SEQ ID 7762. 81 ---SerLeuSerSerAsnAspAspGlyTyr-----Example 2; SEQ ID NO 7762; 210pp; English. 992 CTGCCCACACAGACCTTGCTGCTGC 1018 115 ThrSerValSerArgProCysSerCys Zlotnik A; (PROT-) PROTEIN DESIGN LABS INC. ADQ24942 standard; DNA; 3957 26-NOV-2003; 2003WO-US038193 26-NOV-2002; 2002US-0429739P (first entry) Ginsburg WM, WPI; 2004-441208/41. 65 GluGlu--WO2004048938-A2 Homo sapiens 26-AUG-2004 10-JUN-2004 90 105 Aziz N, RESULT 11 ADQ24942 엄 d à 셤 ò ò ò g d à

The invention relates to a novel method for detecting soft tissue sarcoma which comprises obtaining a first soft tissue sample from an individual and a normal soft tissue sample from the same or different individual, determining the expression of a gene in both samples and comparing the expression of the gene in both soft tissue samples indicates the of protein expression in the first soft tissue sample indicates the presence of soft tissue sarcoma. The method of the invention has cytostatic applications and may be useful for detecting soft tissue sarcoma, possibly via gene therapy or vaccine production. The nucleic

œ

```
811
                                                                                                                                           871
                                                                                                                                                                                                                                                    932 AATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAACCCTGGCAGCCTCCTGCAG 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to an isolated polypeptide or human secreted protein. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind are useful for preparing a diagnostic or pharmaceutical composition for diagnosing or treating allergic or asthmatic disorders. The polypeptide is also useful for identifying a binding partner by contacting the polypeptide with a binding partner, and determining whether the binding partner increases or accidence are also useful for detecting, preventing, diagnosing, prognosticating, treating or ameliorating inflammatory disorders neoplastic diseases, wound healing and disorders of epithalial cell proliferation, immune disorders, cardiovascular disorders, blood-related
80
                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human secreted protein; Antiallergic; Antiinflammatory; Antibacterial;
Anti-HIV; Cytostatic; Immunosuppressive; Hemostatic; ss.
                                                              | | | | AAGGAAGGAGGAGGAGGTCTCAGAGACAGAGCTCAGAGCTTTCACTCT
                                                                                                                                                                ---GluAsnileAspSerLeuThrArgLysValArgGlnPheArgGlu---
                                                                                                                                                                                           CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG
                                                                                                                                                                                                                             ---ArgSerGluThrGluTyrAlaLeuLeuArg
                                          --ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                  GAATCTCTATCTAACCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New human secreted proteins and nucleic acid molecules, useful for preparing a diagnostic or pharmaceutical composition for diagnosing treating allergic or asthmatic disorders, or related immediate
                                                                                                       ---SerLeuSerSerAsnAspAspGlyTyr----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human secreted protein encoding sequence #105.
                                                                                                                                                                                                                                                                                                                 992 CTGCCCCACACAGGCCTTGCTGCTGC 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 7; SEQ ID NO 105; 1323pp; English.
                                                                                                                                                                                                                                                                                      ThrSerValSerArgProCysSerCys
                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                            ADD37623 standard; cDNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001US-0277340P.
2001US-0306171P.
2001US-0331287P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-2002; 2002WO-US008279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypersensitivity disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-140218/13.
                                          GluGlu-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200290526-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAR-2001; 2
19-JUL-2001; 2
13-NOV-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-NOV-2002
                                            65
                                                                                                     81
                                                                                                                                   812
                                                                                                                                                                90
                                                                                                                                                                                              872
                                                                                                                                                                                                                           105
                                                                                                                                                                                                                                                                                       115
                                                                                                                                                                                                                                                                                                                                                                                                           ADD37623;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rosen CA,
                                                                                                                                                                                                                                                                                                                                               RESULT 9
ADD37623
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                     셤
                                                                                                \delta
                                                                                                                            음
                                                                                                                                                             ò
                                                                                                                                                                                     qq
                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                               g
```

```
endocrine disorders , or gastrointestinal
                                                                                                                                                                                                                                                                                                                                                                                 572 CICCIACAAICCICCIIGICCIGGGAAGCCAGGAGCAAGCCCAGAGCACAAGCAGGAG 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                 632 CAAGGAGTGGAGCACAGGAGCCGACACAAGAACACAAAGGAGGAAAAA 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAATG 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                812 GAATCTCTATCTTCTACCTTCCTCTTTTGCTCCCCGGGTACGAGAAGTAGAGTCTACT 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----ArgSerGluThrGluTyrAlaLeuLeuArg 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                932 AATGAAATATATGATGAGAACTCCTACTGGAGAAACCAAAAACCCTGGCAGCCTCCTGCAG 991
                                                                                                                                                                                                                                                                                                                                                  LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGlyAserGlySer 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunosuppressive; antiinflammatory; antiasthmatic; antiallergic; crobstatic; crebbroprotective; neuroprotective; nootropic; cardiovascular; antiarreliosclerotic; gene therapy; human secreted protein; immune disorder; inflammation; respiratory disorder; cancer; CNS disorder; neurodegenerative disorders; inflammatory bownel disease; nephritis; Crohn's disease, asthma; allergy; multiple sclerosis; ischaemic brain injury; Parkinson's disease; materosclerosis; myocarditis; chromosome mapping; firiple helix formation; antisense gene therapy; forensic biology; ds;
             disorders. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or long-range restriction mapping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunological probes for differential identification of the tissues
                                                                                                                                                                                                                                                                                                                                                                                                                25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                  istochemistry assays. The present sequence represents a human
                                                                                                                                               Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;
                                                                                                                                                                                                     1892
36
21
62
30
                                                                                                                                                                                                                 Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---SerLeuSerSerAsnAspAspGlyTyr--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     encoding human secreted protein #309.
                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                      x ADD37623 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCCCCACACAGAGCCTTGCTGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrSerValSerArgProCysSerCys
                                                                                                                  secreted protein encoding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADAS6130 standard; DNA; 1892
                                                                                                                                                                                                  0.19
98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135)
                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluGlu-
                                                                                                                                                                                                                                   Percent Similarity:
                                                                                                                                                                                Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADA56130;
                                                                                                    immunohi
                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88888888888888
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                             dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
thrombocytopenia), allergic reactions including asthma or eczema, inflammatory disorders (e.g. ischaemia-reperfusion injury, inflammatory bowel disease or Crohn's disease), neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. atherosclerosis, myocarditis), infectious diseases (bacterial, fungal or viral infections including HIV/AIDS), or wound healing and disorders of epithelial cell proliferation. The nucleic acids are also useful for chromosome identification, radiation hybrid mapping or longrange restriction mapping, as molecular weight markers, or as hybridization or diagnostic probes. The polypeptides and antibodies are useful for providing immunological probes for differential identification of the tissues immunohistochemistry assays. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antianaemic; antirheumatic; antiarthritic; antiinflammatory; antithyroid; antidiabetic; immunosuppressive; dermatological; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crecracaarecrecrrerecerdedaaeceaesaecaaeceaesaecaaecaeseae 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluGlu-------ValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATCTCTATCTTCTTTTGCTCCCGGGTACGAGAAGTAGAGTACTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---GluasnileAspSerLeuThrArgLysValArgGlnPheArgGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----ArgSerGluThrGluTyrAlaLeuLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    haematopoietic or haematological disorders (e.g. anaemia,
                                                                                                                                                                                                                                                                                   Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                      1892
36
21
62
30
                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human secreted protein-related DNA - SEQ ID 211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCCCCACACAGAGCCTTGCTGGTGC 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---SerLeuSerSerAsnAspAspGlyTyr--
                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 ThrSerValSerArgProCysSerCys 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135) x ADA39940 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADC73578 standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                      0.19
98.00
38.26%
24.16%
                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADC73578;
   anaemia),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
ADC73578
                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
   à
```

```
the invention transfer to a nover number section prolypeptical completed defined sequence given in the specification. The polypeptide, nucleic acid molecule, antibody, agonist or antagonist of the invention may be useful for preparing a composition for diagnoshing or treating a haemopoietic or haematologic disorder such as anaemia, autoimmune disorders such as rheumatologic disorder such as anaemia, autoimmune disorders such as rheumatologic disorders inflammation, Grave's disease, neurodegenerative disorders including Parkinson's disease and Alzheimer's disorders including Parkinson's disease and Alzheimer's atherosclerosis or cancer, as well as bacterial, viral, fungal or atherosclerosis or cancer, as well as bacterial, viral, fungal or parasitic infections. The polypeptide any also be used during gene the polypeptide with a binding partner and determining whether the binding partner increases or decreases the activity of the polypeptide. The current sequence is that of the human secreted protein-related DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAAGGAGTGGAGCACAGAGCCGACACAAGAACACAAGAAGAGGAGGGGCCAGAAA 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ಥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hematopoietic or hematologic disorders (e.g. anemia), autoimmune
disorders (e.g. diabetes) or hyperproliferative disorders (e.g. cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   relates to a novel human secreted polypeptide comprising
               fungicide; antiparasitic; antiarteriosclerotic; vulnerary; cytostatic; haemopoletic; haematologic; anaemia; autoimmune disorder; rheumatolid arthritis; inflammation; Grave's disease; diabetes; systemic luque erythematosus; globerulonephritis; neurodegenerative; Parkinson's; Alaheimer's; wound; hyperproliferative; atherosclerosis; cancer; bacterial; viral; fungal; parasitic infection; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 AspGluGluArgLysArgClnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide for diagnosing, preventing or treating
neuroprotective; nootropic; antibacterial; virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1892
36
21
62
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   472 G; 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 27; SEQ ID NO 211; 2272pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-005-907-2 (1-135) x ADC73578 (1-1892)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ີ່ວ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     565
                                                                                                                                                                                                                                                                                                                    21-MAR-2001; 2001US-0277340P.
19-JUL-2001; 2001US-0306171P.
13-NOV-2001; 2001US-0331287P.
                                                                                                                                                                                                                                                                               19-MAR-2002; 2002WO-US008277.
                                                                                                                                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.19
98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 461 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430516/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atherosclerosis).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; ADC74193
                                                                                                                                                                                                          WO2003038063-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disorders (e.g.
                                                                                                                                         human; gene; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention
                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aliqnment Scores:
                                                                                                                                                                                                                                                 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                 Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
9
         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
```

45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer

ò

φ

```
1, Ni J, Rosen CA, Yu G, Young PE, Feng P, Soppet DR;
Endress GA, Duan RD, Kyaw H, Ebner R, Lafleur DW, Olsen HS;
                                                                                                                                                                                                             New isolated human genes, useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders.
                                                                                                                                                                                                                                              Claim 1; Page 346; 484pp; English.
                                                            98US-0078574P.
98US-0078576P.
98US-0078573P.
98US-0078573P.
98US-007853P.
98US-00785312P.
                                              98US-0078566P.
                         99WO-US005804
                                                                                                                     98US-0080313P
                                                                                                                            98US-0080314P
                                                                                                                                           (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                         WPI; 1999-562050/47.
                                                                                                                                                                          Moore PA;
                                                                                                                                                                                                  P-PSDB; AAY41387.
                       18-MAR-1999;
                                                                                           19-MAR-1998;
                                                                                                                            01-APR-1998;
       23-SEP-1999
                                                      19-MAR-1998
                                                              19-MAR-1998
                                                                            19-MAR-1998
                                                                                     19-MAR-1998
                                                                                                    19-MAR-1998;
                                                                                                            01-APR-1998
                                                                     19-MAR-1998
                                                                                                                   01-APR-1998
                                                                                                                                                           SM
                                                                                                                                                                   Wei Y,
Shi Y,
                                                                                                                                                           Ruben
```

This sequence represents a nucleic acid molecule which encodes a secreted human protein. The gene number, and the clone it is derived from, are detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. AAZ24802) for increasing the stability of the fused protein as compared to the human protein only. The invention relates to 95 novel genes and their fragments (nucleic acid sequences: AAZ24811-Z24807; amino acid sequences AAY41308-Y41404) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pash cological conditions can be diagnosed by determining the amount of the pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the polynucleotides, based on which tissues they are most highly expressed in the new polynucleotides. (see AAZ24811 for described uses)

Sequence 1892 BP; 461 A; 565 C; 472 G; 394 T; 0 U; 0 Other;

Alignment Scores: Pred. No.: Score. Percent Similarity: Best Local Similarity: Query Match:	0.19 98.00 38.26% 24.16% 13.71%	Length: Matches: Conservative: Mismatches: Indels:	1892 34 521 30 4
US-10-005-907-2 (1-135) x AAZ24890 (1-1892)	x AAZ24890	(1-1892)	
W. T. A.			

g

692 CAGGAAGAGCAAGAAGGAACAGGAAGAGGAGGAAAGCAGGAAGGAGACAGGGACT 751

GluGlu------ValCysTyrThrVallleAsnHislleProHisGlnArgSer 80

LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer 64

45

ò

g

d

ð

65

ò

811 104 931 Human; secreted protein; cancer; hyperproliferative disorder; heumatoid arthritis; autoimmune disorder; haematopoietic disorder; anaemia; allergic reaction; asthma; cardiovascular disorder; wound healing; cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; vulnerary; cardiant; gene therapy; ss. 871 ----ArgSerGluThrGluTyrAlaLeuLeuArg 114 932 AATGAAATATATGATGAGAACTCCTACTGGAGAACCAAAACCCTGGCAGCCTCCTGCAG 991 68 872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG 812 GAATCTCTATCTTAACCCTTCCTCTTTTGCTCCCGGGTACGAGAAGTAGAGTTCTACT ------GluAsnileAspSerLeuThrArgLysValArgGlnPheArgGlu----SerLeuSerSerAanAspAspGlyTyr-----1018 115 ThrSerValSerArgProCysSerCys 123 CTGCCCCACACAGCCTTGCTGGTGC Human secreted protein encoding cDNA. ADA39940 standard; cDNA; 1892 BP. (first entry) Homo sapiens. 20-NOV-2003 90 105 992 ADA39940; ADA39940 g g ò à g ð g à

WO2002102993-A2 27-DEC-2002

19-MAR-2002; 2002WO-US008123

21-MAR-2001; 2001US-0277340P. 19-JUL-2001; 2001US-0306171P. 13-NOV-2001; 2001US-0331287P.

(HUMA-) HUMAN GENOME SCI INC.

Ruben SM; Rosen CA, WPI; 2003-175238/17.

a diagnostic or pharmaceutical composition for diagnosing, or treating cancer or other hyperproliferative disorder, New human secreted proteins and nucleic acid molecules, useful for asthma, allergies or AIDS. preventing preparing

Claim 9; SEQ ID NO 322; 3205pp; English

The invention relates to novel genes ADA39629-ADA40565 and proteins ADA40566-ADA41501 for human secreted proteins, useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The polypeptides, nucleic acid molecules, antibodies or their fragments, and agonists or antagonists that bind to the polypeptide are useful for preparing a diagnostic or pharmaceutical composition for bolypeptides and nucleic acid molecules are also useful for detecting, proynogosticating, treating or ameliorating cancer protein prognosticating, treating or ameliorating concerdisoreter hyperproliferative disorders including neoplasms, autoimmune disorders (e.g. diabetes, rheumatonia anticimmune through anticipal concerdisoreters (e.g. diabetes, rheumatonia anticipal concerdisoreters) erythematogus, multiple sclerosis, autoimmune thyroiditis or haemolytic

```
Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; ds; immune system; asthma; lymphocytic disease; brain; hepatic; lymphom; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AlDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthitis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
           forensics, gene mapping, medical imaging, identification of mutational responsible for genetic disorders or other traits, assessing biodiversity and producing many other types of data and products dependent on DNA and amino acid sequences. They are also useful for preventing, treating or ameliorating medical conditions, such as cancer, neurodegenerative disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell periodontal disease, liver fibrosis, infections (e.g. viral, fungal or bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis). Sequences ABX04986-ABX0531 represent human polymucleotides of the invention. Note: The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied by the Buropean Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ||||||||:::|||||||
| GAGTATITCACTITCTACATATGCCTITCTACAGACCCCAGGCATGCCCCGALCCCCAGAAGAT 625
The polynucleotides and polypeptides are useful in diagnostics,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCys---ThrHisGluHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 GlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAspLysLysSerGlnGluVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  329 AAAAAAATACTCATTTTTGAAAAGAGG---CAAGATTCCCAAAAAGAAAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrVallleAsnHis---IleProHisGlnArgSerSerLeuSerSerAsnAspAspGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrgluAsnIleAspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerSerThrSer---AsnGlnGluAsnGluAsnGlySerGlySerGluGluValCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 775 BP; 226 A; 202 C; 160 G; 187 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human secreted protein gene 80 clone HLWAY54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (1-775)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SAATATGAACTTCTCATGCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x ABX05108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ24890 standard; DNA; 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.7e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149.00
60.19%
34.26%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20.84%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09947540-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ24890;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
     888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                         1332
                                                                               1156 AATGTGAGAAATGCGAAAGCGGAACATCCAGATGCTGGGATCACCATATCGCT 1215
                                                                                                                                                                                                                                                                                                                                                                                               1453 GAGTCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTANATATGCCTTCTACAGACCCC 1512
                                                                                                                                                                                                1216 GAAGGGTGTTTCTGCCTTCCATGGAAAAAAATACTCATTTTTGAAAAGAGG---CAAGAT 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; gene; ss; genetic disorder; gene mapping; medical imaging; cancer; neurodegenerative disorder; lymphoid cell disorder; osteoporosis; parkinson's disease; Alzheimer's disease; bone degenerative disorder; osteoarthitis; periodontal disease; liver fibrosis; viral infection; fungal infection; bacterial infection; autoimmune disease; diabetes; atopic dermatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to human polynucleotides and the polypeptides they
                                                                                                                                             42
                                                                                                                                                                                                                                                      GlnAspLysLysSerGlnGluValSerSerThrSer---AsnGlnGluAsnGluAsnGly 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated polypeptides and polynucleotides, useful for preventing, treating or ameliorating medical conditions, such as cancer, neurodegenerative disorders, lymphoid cell disorders, bone degenerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             بد)
د
                                                                                                                                                                                                                                                                                                            1273 TCCCAAAACGAAAATGAAAGAATGİÇAİÇİAÇİCCCATCCAGÇAĞGACAAİGTIGACCAG
                                                                                                                                                                                                                                                                                                                                                                  62 SerGlySerGluGluValCysTyrThrValileAsnHis---IleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhao QA,
z, Ghosh l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1513 AGGCATGCCCGATCCCCAGAGGATGAATATGAACTTTTCATGCCTCAC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerCys -- - ThrHisGluHisAspTyrGluValValPheProHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang J,
R, Wang
                                          --- LysLysGlyAsnProAspGluGluArgLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tang YT, Zhou P, Goodrich R, Asundi V, Kue AJ, Yang Y, Ma Y, Yamazaki V, Chen Mehrman T, Wang J, Wang D, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        claim 1; SEQ ID NO 123; 235pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              novel polynucleotide #123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2002; 2002WO-US005109.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-MAR-2001; 2001US-00810173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX05108 standard; cDNA; 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disorders, and infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yang Y, Ma
T, Wang J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-040556/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; ABU00030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200274961-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX05108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                               43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                             20
                                                                                                                                                   31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CX XX AX A B B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B
```

505 108

88

445

69

U; 0 Other;

775 37 28 39 4

요 ö 엄 ò g

g

8

g 8 g ò

ò

```
254 GAAGGGTGTTTCTGCCTTCCATGGAAAAATACTCCATTTTTGAAAAAGAGG---CAAGAT 310
                                                                                                                                                                                                                                                                                                         311 TCCCAAAACGAAAATGAAAAATGTCATCTACTCCCATCCAGGACAATGTTGACCAGACC 370
                                                                                                                                                                                                                                                                                                                                                              LeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArgGln 101
                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAACTCTGCTGAAGAGTACTATGAGAATGTTCCCTGCAAAGCTGAGAGACCCAGAGAG 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             491 TCCTTGGGAGGAACTGAGACTGAGTATTCACTTCTACATATGCCTTCTACAGACCCCAGG 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; ss; gene; secretory protein; secretory polymucleotides; SPTM; SPTM-related disease; somatic gene therapy; germline gene therapy; severe combined immunodeficiency; intracellular parasite protection; fungal parasite; memorasite, cell proliferative disorder; cancer; memora disorder; AIDS; neurological disorder; Parkinson's disease; mentor neuron disorder; demyelinating disease; multiple sclerosis; meningitis; abscess; prion disease; cerebral palsy; neuroskeletal disorder; peripheral nervous system disorder; dermatomyositis; polymyositis; myopathy; myasthenia gravis; mental disorder; Tourette's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCys 121
                                                                                                                                                                     30
                                                                                                                                                                                                                               42
                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                         62
                                                                                                     MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro---
                                                                                                                                                                                   194 AATGTGAGAATGCAAAAGCCCCAAACAGAGAACATCCAGATGCTGGGATCACCATATCGCT
                                                                                                                                                                                                                       ----GlnGluMetThrThrPheGluArgLysLeuGlnAsp
                                                                                                                                                                                                                                                                                 43 GlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySer
                                                                                                                                                                                                                                                                                                                                           63 GlyserglugluValCysTyrThrVallleAsnHis---IleProHisGlnArgSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SerCys---ThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               551 CATGCCCGATCCCCAGAAGATGAATATGAACTTCTCATGCCTCAC 595
      33
54
51
5
                                                                                                                                                              -----LysLysGlyAsnProAspGluGluArgLysArg
    Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secretory polynucleotide (sptm) 46.
                                              Gaps:
                                                                           x ACC59951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL99791 standard; cDNA; 1643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0229747P.
2000US-0229748P.
2000US-0229749P.
2000US-0229750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-AUG-2001; 2001WO-US027297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                      US-10-005-907-2 (1-135)
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200220756-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-SEP-2000;
05-SEP-2000;
05-SEP-2000;
05-SEP-2000;
05-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2002.
                                                                                                                                                               20
                                                                                                                                                                                                                         31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL99791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                                                                                              임
                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                              ઠે
                                                                                                                                                                                       qq
                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
```

```
The invention comprises the amino acid and coding sequences of human secretory (SPTM) proteins. The SPTM DNA and amino acid sequences are secretory (SPTM) proteins. The SPTM DNA and amino acid sequences are useful for transfer or confering disease or condition associated with the expression of functional SPTM. The SPTM DNA sequences are useful for somatic or combined immunodeficiency). The SPTM DNA sequences are also useful in providing protection against intracellar parasites (e.g. fungal Compared in for diagnosing cell proliferative disorders, cancer, immune disorders (e.g. ALDS), neurological disorders (e.g. parkinson's disease), motor neuron disorders, demyellarting diseases (e.g. multiple CC disease), motor neuron disorders, demyellarting diseases (e.g. multiple CC disease), motor neuron disorders, peripheral neurous system disorders, cancer, controskeletal disorders, peripheral neurous system disorders, dermatomyositis and polymyositis, myasthenia gravis, and mental disorders (e.g. Tourette's syndrome). CDNA sequences ABL999146 - ABL99929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polynucleotide sequences encoding human secretory proteins useful for gene therapy of e.g. genetic deficiency disorders, cancers, and diseases caused by intracellular parasites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stuart J, Lincoln SE, Altus CM, Dufour GE, Chalup MS, Hillman JL; Jones AL, Yu JY, Wright RJ, Gietzen D, Liu TF, Yap PE, Dahl CR; Momlyama MG, Bradley DL, Rohatgi SD, Harris B, Roseberry AM; Gerstin EH, Persalta CH, David MH, Panzer SR, Flores V, Daffo A; Marwaha R, Chen AJ, Chang SC, Au AP, Inman RR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1643 BP; 413 A; 382 C; 384 G; 460 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disorders (e.g. Tourette's syndrome). cDNA sequences ABL997 represent human secretory polynucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 275-276; 585pp; English.
                               2000US-0230514P
2000US-0230514P
2000US-0230517P
2000US-0230519P
2000US-0230519P
2000US-0230596P
2000US-0230596P
2000US-0230597P
2000US-0230596P
2000US-0230596P
2000US-0230596P
2000US-0230596P
                                                                                                                                                                                                                                                                                  2000US-0230999P.
2000US-0230990P.
2000US-0230896P.
                                                                                                                                                                                                                                                                                                                                    2000US-0230897P.
2000US-0230951P.
2000US-0231163P.
                                                                                                                                                                                                                                                                                                                                                                                          2000US-0231832P
                                                                                                                                                                                                                                                                                                                                                                                                                         (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-315658/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; ABB97794
05-SEP-2000,
05-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
06-SEP-2000,
                                                                                                                                      06-SEP-2000;
                                                                                                                                                                                        06-SEP-2000;
                                                                                                                                                                         06-SEP-2000;
                                                                                                                                                                                                                           06-SEP-2000;
                                                                                                                                                                                                                                                              06-SEP-2000;
06-SEP-2000;
                                                                                                                                                                                                                                                                                                 06-SEP-2000;
                                                                                                                                                                                                                                             06-SEP-2000;
                                                                                                                                                                                                                                                                                                                  07-SEP-2000;
```

1096 Argegaaarrerererereadagaaaaacagegegaagaacacreaagaagareerreg 1155

1 MetGlyAsnTyrLeuheuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysPro--- 19

US-10-005-907-2 (1-135) x ABL99791 (1-1643)

1643 47 32 55 22 6

Length:
Matches:
Conservative:
Mismatches:

8.15e-09 159.00 50.64% 30.13% 22.24%

Best Local Similarity:

Query Match: DB:

Percent Similarity:

Alignment Scores:

Indels:

```
SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAGTGGTTCTGAAGAAGTGTGCTACACTGTCATTAATCACATCCCCCATCAGAGATCC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGATCAAGATAAGAAAAGCCAAGAAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recercadecrecantenegrenegerargadaacarregacrecercacaaggaaagreaga 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGITITAGAGAAAGGICAGAGACAGAATAIGCCCITCITAGGACITCIGITAGIAGGCCI 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; immune response associated protein; IRAP; anti-HIV; antiallergic; antiinflammatory; antianaemic; antiparkinsonian; nootropic; antithyroid; anticonvulsant; antiarteriosclerotic; antiasthmatic; immunosuppressive; cytostatic; hepatotropic; dermatological; antidabetic; nephrotropic; antigout; thyromimetic; neuroprotective; osteopathic; antiarthritic; antiparastic; antibacitatic; uropathic; protoxocacide; antitheumatic; haemostatic; antibacterial; virucide; optichalmological; fungicide; gene therapy; immune system disorder; neurological disorder; muscle disorder; cell proliferative disorder;
response in a patient. The protein can also serve as a target that modulate gene expression or activity and as an antigen to raise polyclonal or monoclonal antibodies. (Il) is useful for identifying agents that modulate expression of the protein or agents, such as agonists or antagonists. The agonists or antagonists are useful for modulating biological activity and function of (II) and thus are useful for alleviating disease conditions such as allergic hypersensitivity, seasonal rhinitis, asthma, urticaria, atopic dermatitis or mastocytosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrThheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetGlyAsnTyrLeuLeuArglysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                               25 ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATAAAAAAGAAGCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                                        Sequence 3762 BP; 1220 A; 672 C; 680 G; 1190 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3762
135
0
0
0
                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IRAP-28 encoding cDNA SEQ ID NO:63
                                                                                                                                                                                                                                                                                                                                                                       US-10-005-907-2 (1-135) x ABN81319 (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC59951 standard; cDNA; 732 BP
                                                                                                                                                                                                                                9.5e-75
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infection; gene; ss
                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUL-2003
                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC59951;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC59951
                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
         88888888888
                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

Location/Qualifiers

Homo sapiens

80

144

```
XX ACC59324 to ACC5958 encode the human immune response associated proteins CC given in ABR43205 to ABR43239, designated IRAP-1 to IRAP-29 [I]. [I] have anti-HIV, antialergic, antiinflammatory, antianaemic, antiparkinsonian, nootropic, anticonvulsant, antiatreriosclerotic, antiaschmatic, antigout, immunosuppressive, antithyroid, cytostatic, hepatotropic, dermatological, antidathritic, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, ophthalmological, antihelminthic, antibacterial, virucide, cortocoacide and fungicide activities, and can antagonists are useful for diagnosing, treating or preventing disorders associated with aberrant carpression of IRAP, such as immune system disorders (e.g. Alb), asthma, antihelminthic, allergies, autoimmune thyroiditis, contact dermatis, Crohn's disease, disease, Hashimoto's thyroiditis, irritable bowel syndrome, contact dermatis, cortocoacides, and arbritis, soteopromeis, pancreatitis, Reiter's syndrome, rheumatoid arbritis, soteopromeis, pancreatitis, capterios cor mental retardation), muscle disorders (e.g. canal undomypathy, myocarditis, or mental retardation), muscle disorders (e.g. cardiomypathy, myocarditis, catheroselerosis, cirrhosis, hepatitis, paroxymanl nocturnal hemoglobinuria, polycythaemia ver viral, paroxymanl nocturnal remachine, and paroximal, paroxymanl nocturnal, thromobocytopeania or cancer), or viral, bacterial, fungal, parasitic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New human immune response associated proteins and polynucleotides, useful for diagnosing, treating or preventing immune system disorders, e.g. AIDS or anemia, cell proliferative disorders, e.g. cancer, or neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ho A, Baughn MR, Becha SD, Burford N, Elliott VS, Emerling BM; Forsythe IJ, Gorvad AE, Griffin JA, Hafalia AJA, Honchell CD; Ison CH, Burrill JD, Blake JJ, Lee EA, Marquis JP; Margon PM, Lee S, Sprague WW, Swarnakar A, Tang YT, Tran B; Tran UK, Bhatia U, Chawla NK, Warren BA, Zheng W, Xu Y, Yue H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 732 BP; 213 A; 178 C; 178 G; 163 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protozoan or helminthic infections
                                /*tag= a
/product= "IRAP-28"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 5; Page 208; 213pp; English.
                                                                                                                                                                                                                                                                                                                     21-NOV-2001; 2001US-0332140P.
07-DEC-2001; 2001US-03402B2P.
09-LAN-2002; 2002US-03462BP.
20-FEB-2002; 2002US-035108BP.
15-MAR-2002; 2002US-036108BP.
16-MAR-2002; 2002US-036494P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.55e-10
169.50
                                                                                                                                                                                                                                     2001US-0327395P.
2001US-0328923P.
                                                                                                                                                                                                                                                                              2001US-0342810P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-JUN-2002; 2002US-0388180P
                                                                                                                                                                             19-SEP-2002; 2002WO-US029979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INCY-) INCYTE GENOMICS INC.
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-363161/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; ABR43232
                                                                                               WO2003025542-A2.
                                                                                                                                                                                                                                                          12-OCT-2001;
19-OCT-2001;
09-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                   21-SEP-2001;
05-OCT-2001;
                                                                                                                                      27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disorders.
```

a

Wehrman T; Weng G; , Wang J, Wang Z, 1 Xue AJ, Zhao QA, Ma Y, Asundi V, Tang TY, Zhang J, Ren F, X Zhou P, Ghosh M, Wang D, M Haley-Vicente D, Drmanac RT;

WPI; 2003-371981/35 P-PSDB; ADC31731 New polynucleotide and polypeptide useful for diagnosing, preventing or treating conditions such as neurodegenerative diseases, anemias, platelet discrders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or

Claim 1; SEQ ID NO 842; 1185pp; English.

The invention relates to 971 novel human cDNA sequences (ADC29919-CDC3089) and the polypeptides they encode (ADC30890-ADC31860). The invention also relates to nucleic acid sequences over 99% identical with the novel human cDNAs. The invention additionally encompasses expression vectors and host cells comprising a nucleic acid of the invention; the crecombinant production of a polypeptide of the invention; an antibody adjainst a polypeptide of the invention; an antibody polypeptide of the invention; and methods of invention further discloses methods of the invention. The ameliorating a medical condition; kits comprising polymucleotide probes invention further discloses methods of peventing, treating or ameliorating a medical condition; kits comprising polymucleotide probes and/or monoclonal antibodies for carrying out the methods of the invention. The ameliorating a medical condition; kits comprising polymucleotide probes and/or monoclonal antibodies for carrying out the methods of the invention. Corresponding to the compassion of conting sequences corresponding to the connected by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC32622) and the polypeptides encoded by the contigs (ADC326222) and the polypeptides encoded by the contigs (ADC326222) and the polypeptides encoded by the contigs (ADC326222) and the polypeptides of also used for trea ftp.wipo.int/pub/published\_pct\_sequences.

Sequence 667 BP; 216 A; 147 C; 154 G; 150 T; 0 U; 0 Other;

667 1135 0 0 0 0 Conservative: Mismatches: Length: Matches: Indels: 9.55e-76 715.00 100.00% 100.00% Best Local Similarity: Percent Similarity: Alignment Scores: Query Match:

JS-10-005-907-2 (1-135) x ADC30760 (1-667)

Н

à

셤 à qq

245 20 21

306 CAAGATCAAGATAAGAAAGCCAAGAGTTTCATCCACTTCTAATCAGGAAAACGAGAAT 365 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 41

g

à

9

40

61 GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer 80

485 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120 545 GGCAGTGGTTCTGAAGAAGTGTGCTACACTCATTAATCACATCCCCCATCAGAGATCC 425 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100 Human; mast cell; MC; antiallergic; antiinflammatory; antiasthmatic; vasotropic; dermatological; allergy; hypersensitivity; rhinitis; asthma; CAGITIAGAGAAAGGICAGAGACAGAATAIGCCCIICTIAGGACIICIGIIAGIAGGCCI 426 recereaectecaargargargecrargagaacarrgacreecreacaaggaaagrgaga CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135 TGTTCCTGCACCATGAGCATGATTATGAAGTTGTGTTTCCACAC 590 Human mast cell related gene MC1 SEQ ID NO 1. Location/Qualifiers 25. .432 ABN81319 standard; cDNA; 3762 BP. /product= "MC1" (first entry) ๙ /\*tag= Homo sapiens 30-AUG-2002 ABN81319; 996 101 486 121 546 gene; ss. RESULT 2 ABN81319 임 셤 à g ò

07-DEC-2001; 2001WO-US046180. 08-DEC-2000; 2000US-0251835P. 14-MAR-2001; 2001US-0275479P. 28-MAR-2001; 201US-0279115P. 02-APR-2001; 2001US-0280143P. WO200246389-A2 13-JUN-2002

Einstein R; Nocka K, Pirozzi G,

(UNIO ) UCB SA.

WPI; 2002-508560/54. P-PSDB; ABB77569 Novel isolated nucleic acids that are differentially expressed in mast cells in patients with allergic hypersensitivity, encoding proteins associated with mast cell regranulation and allergic hypersensitivity.

Claim 1; Page 95-97; 119pp; English.

The invention relates to isolated nucleic acid (ABN81319-ABN81324), corresponding to genes differentially expressed in mast cells following activation or in patients with allergic hypersensitivity disease, (I) that encodes proteins (ABB7756-ABB77575) (II) or a protein fragment of (II) if at least 6 amino acids. (II) is useful for identifying binding partners. (I) or (II) is useful for diagnosing or treating a disease state (e.g. allergic hypersensitivity, seasonal rhinitis, asthma, urticaria or atopic dermatitis or mastcoytosis) in a subject which involves determining the level of expression of (I) or (II). A computer system, comprising a database containing information identifying the expression level in a tissue or at least one mast cell of (I), is useful for presenting information to identify the relative expression level of (I). (II) is used as a marker to detect, diagnose or identify an allergic

OM protein

Run on:

Sequence:

```
Aav20445 Human C-t
Aav09303 Human Trk
Ab127495 Drosphil
Aas71153 DNA encod
Aas69553 DNA encod
Aas69553 DNA encod
Ado00884 Human hom
Adv31302 Human kid
Ad45687 Human ova
Ab133112 Human ova
Ab133112 Human ova
Ab133112 Human pro
Ab13312 Human pro
Ab13312 Human pro
Ab13312 Human pro
Ab13312 Human pro
Aav6785 Human pro
Aav6785 Human pro
Aav6785 Human con
Aav67895 DNA encod
Aas70692 DNA encod
Aas70692 DNA encod
Aas70691 Human cDN
Ad47391 Human cDN
Ad47391 Human cDN
Ad47391 Human cDN
Ad47391 Human cDN
Ad47391 Human cDN
Ad48460 DNA encod
Ad48460 DNA encod
        Add37623 Human sec
Add37623 Human sec
Ada56130 Gene enco
                                                                                                                                                                                                                                                                                                                                      Adq22543 Human sof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; diagnostic; drug screening; forensics; gene mapping; biodiversity assessment; Parkinson's disease; Alzheimer's disease; usuoidepenerative diseases; anaemia; platelet disorder; wound; burns; ulcers; osteoporosis; autoimmune disease; cancer; molecular weight marker; food supplement; antiparkinsonian; nootropic; anticonian; anticoniconian; thrombolytic; vulnerary; anticonic; immunosuppressive; anticinflammatory; cytostatic; gene therapy; chromosome 1; gene; ss.
                                        Adq24942 Human sof
Ade62022 Rat gene
                                                                                                                                                                                                                                                                                                                                                  Aai60039 Human pol
Aax84690 CBCALD05
Abk47580 cDNA enco
                                                                                                                                                                                                                                                                                                                                                                                                                  Adi40373 Human pu
                                                                                                                                                                                                                                                                                                                                                                                             Ach04802 1
Acd44612 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human novel cDNA sequence, SEQ ID NO:842.
                                                                                                                                                                                                                                                                       ADQ17931
ADI02719
ACA03930
        ADC73578
ADD37623
ADA56130
                                                                                                                                                                                   ABL33112
ADJ67693
                                                                                                                                                                                                                                                                                                                             ADB48220
ADQ22543
                                                                                             AAS71153
AAS75467
AAS69553
                                                                                                                                                              ADF81540
                                                                                                                                                                                                                                        ABK32895
AAS70692
ACA90154
                                        ADQ24942
                                                    ADE62022
                                                             AAV20445
AAA09303
                                                                                                                               AD000884
                                                                                                                                                    ADQ24514
                                                                                                                                                                                                                    AAX06785
AAZ50927
                                                                                                                                                                                                                                                                                                                                                                                                                     ADI40373
                                                                                  ABL27495
                                                                                                                                                                                                                                                                                                                    ADQ98460
                                                                                                                                                                                                                                                                                                                                                   AA160039
                                                                                                                                                                                                                                                                                                                                                               AAX84690
                                                                                                                                                                                                                                                                                                                                                                         ABK47580
                                                                                                                                                                                                                                                                                                                                                                                    ABA83301
                                                                                                                                                                                                                                                                                                                                                                                              ACH04802
                                                                                                                                                                                                                                                                                                                                                                                                         ACD44612
                                                                                                                                         ABX71302
                                                                                                                                                                          ADL45687
                                                                                                                                                                                                          AAH99858
                                                                                                                                                                                                                                                                                                        AAI58253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADC30760 standard; cDNA; 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-SEP-2002; 2002WO-US030474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-SEP-2001; 2001US-0324631P
1892
1892
1892
1892
3957
584
2301
2301
1824
654
                                                                                                         654
654
3186
3186
3186
3186
52109
651
1671
1671
1899
1992
8083
8491
                                                                                                                                                                                                                                                                                             8493
8503
8503
8503
8517
8517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HYSE-) HYSEQ INC
402003029271-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                               89
89
89
89
89
89
89
89
89
                                                                                                                               ADC30760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC30760
          υ
                                                                                                                                                                                                                                                                                                                                                   Command line parameters:
-MODEL=frame+ p2n.model- 1DEV=xlh
-Q-CGR2_1/USPTO_SPOOl/US10005907/runat_16112004_140457_6157/app_query.fasta_1.327
-Q-CGR2_1/USPTO_SPOOl/US10005907/runat_16112004_140457_6157/app_query.fasta_1.327
-DB-N Geneeq_23Sep04 -QFMT=fastap -SUFFIX=rng -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -BND=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE_bct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL.GAL-OUTFMT=pto -NORN=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US10005907_@CGN_1 1 470 @runat_1611204_140457_6157 -NCPU=6 -ICPU=3
-NO MAAP -LAGGEQUERS -NESC SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THRADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FCAPOP=6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Abn81319 Human mas
Acc59951 Human IRA
Abl99791 Human sec
Abx05108 Human nov
Aaz24890 Human sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Adc30760 Human nov
                                                                          November 18, 2004, 21:26:34; Search time 424 Seconds (without alignments) 1671.396 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                            1 MGNYLLRKLSCLGENQKKPK......svSRPCSCTHEHDYEVVFPH 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                      8269772
            GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd
                                                       using frame_plus_p2n model
                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                4134886 segs, 2624710521 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADC30760
ABN81319
ACC59951
ABL99791
ABX05108
AAZ24890
                                                                                                                                                              BLOSUM62
Xgapop 10.0 , Ygapext (
Ygapop 10.0 , Ygapext (
Fgapop 6.0 , Fgapext Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            geneseqn2001bs:*
geneseqn2002as:*
geneseqn2002bs:*
geneseqn2003as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 geneseqn2003cs:*
geneseqn2003ds:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        geneseqn20048:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  geneseqn2001as:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  geneseqn1980s:*
geneseqn1990s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Geneseq 23Sep04:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     geneseqn2000s:
                                                                                                                                                                                                                                                                            seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 9 8 9 8 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length DB
                                                                                                                        US-10-005-907-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            667
3762
732
1643
775
                                                        nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0
100.0
23.7
22.2
20.8
13.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            715
715
169.5
159
149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                  Perfect score:
                                                                                                                                                                  Scoring table:
```

Database

Result Š.

Minimum DB Maximum DB

Searched:

Human sec Novel hum

```
셤
                                                     ò
                                                                                    g
                                                                                                                  \delta
                                                                                                                                           Q
                                                                                                                                                                         ò
                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 64985, Application US/10437963

Sequence 64985, Application US/10437963

Publication No. US20040123343A1

GENERAL INFORMATION:

APPLICANT: La Rosa, Thomas J.

APPLICANT: Cao, Yongwei

APPLICANT: Boukharov, Andrey A.

APPLICANT: Barbazuk, Brad

APPLICANT: Barbazuk, Brad

APPLICANT: Li, Ping

TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

CURRENT FILING DATE: 2003-05-14

NUMBER OF SEQ ID NOS: 204966

SEQ ID NO 64985
                   121 ATGGAGAAAGAGGTGTCTGATTTCATCCAGGACAGTGGACAGGTCAAGAAAAAGTTTCAG 180
                                                                                                                                 -----ThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyr 110
                                                                                                                                                                                                                                                                                                             355 CAGAAGGCTGAGGAAGCGGAAGCTAAAGGAGCTGGCTCAGAAGCAGGAAGAAGAAGAA 414
                                                                                                                                                                                                                                                                                                                                         111 AlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGluHisAspTyrGlu 130
                                                                                                                                                                                                                                                                                                                                                                            ---GACTACAAG 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||||::::::
|TGGGAAAAGACAATGATGATGCAAAGAAAGATTCAGAAACCGAGGTTGAAAAGGAGCAA 764
PheGluargiysieuGinaspGinaspLysLysSerGinGluValSerSerThrSerAsn 55
                                                                                                                                                                                                                                  -- 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGlyGluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGln 31
                                                        -- AsnGlySerGlySerGluGluValCysTyrThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2693
35
20
62
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-005-907-2 (1-135) x US-10-437-963-64985 (1-2693)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Clone ID: PAT_MRT4530_66077C.1
                                                                                                                                                                         -----SerLeuSerSerAsnAspAsp----
                                                                                                                                                                                                                              --GlyTyrGluAsnIleAspSerLeu-
                                                                                                                                                                                                                                                                                                                                                                      415 GCGCAGCAGGACCTGCGGTTGTGAGTCCTGCCAGC
                                                                                                             71 ValileAsnHisIleProHisGlnArgSer---
                                                                                                                                                                                                                                                                                                                                                                                                 131 ValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                               460 GACAAGTATAGCCAT 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.373
90.50
39.86%
25.36%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-10-437-963-64985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-437-963-64985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                      81
                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                          g
                                                                                                      à
                                                                                                                                      g
                                                                                                                                                                                         q
                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                     g
 ઠે
                         g
                                                   à
                                                                                                                                                                   ò
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
```

```
996 GATTIGGAAGCACCAGIATACCAAGATAATGCCCAGGATGAAATTTCTAGCAAACTGATA 1055
                                         824
                                                                                                      385 GTAGAAGGCTCTGAAGAACAAAAGAACCAGTAAAAGAACAGAGTTATGATGTGCAGATG 944
                                                                                                                                                                                                                                                                     94 SerbeuThrArgLysValArgGlnPheArgGluArgSerGluThrGluTyrAlabeuLeu 113
                                                                             -- LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                               73
                                                                                                                                                                                                                                      74 HislleProHisGlnArgSerSerLeuSerSerAsnAspAspGlyTyrGluAsnIleAsp 93
                             114 ArgThrSerValSerArgProCysSerCysThrHisGluHisAspTyrGluVal 131
  --ArgLysLeuGlnAspGlnAsp--
32 GluMetThrThrPheGlu---
                                                                             45
```

Search completed: November 19, 2004, 05:28:12 Job time : 1530 secs

```
----AAAĊĊAAATAATACACAACGTTTC 5673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5901
                                                                                                                                                                                                                                                                                                                    87 AspGlyTyrGluAsnileAspSerLeuThrArgLysValArgGlnPheArgGluArgSer 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               107 GluThrGluTyrAlaLeuLeuArgThrSerValSerArgProCysSerCysThrHisGlu 126
                                                                                                     6080 GAAAATACTAAAAAATACGACTCAACTTCTTCGGCCTCGACAAAATACACTACACTAAA 6021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 GlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThr 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                      47
                                                                                                                                                                                                                                                                                           67
                                                                                                                                                                                                                                                                                                                                                                  98
                                                                                                                                             35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6020 AAACAAAATAACCCCGATAAAAAAAAAAAAATAAACAACCCTAACTCTCTCATACTAAC
                                                                                                                                                                                                                                                        5960 TTTAAAAATCTAACCCAAAATCTAAAAACCCTTÄÄÄATAACGAAAAAACTTÄÄÄAAATTCT
                                                                                                                                                                                                                                                                                         48 GlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySerGluGluVal
                                                                                                                                                                                                                                                                                                                                                                68 CysTyrThr---VallleAsnHislleProHisGlnArgSerSerLeuSerSerAsnAsp
                                                                                                                                                                                                                    36 PheGluArg-------iyaLeuGluAspGluAspLyaLyaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTHER INFORMATION: Description of Unknown Organism: KiflC nucleic COTHER INFORMATION: acid sequence US-10-261-175A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 651
39
22
51
53
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3. Application US/10261175A; Sequence 10. V220040038222A1; GENERAL INFORMATION: US2004003822A1; GENERAL INFORMATION: WILLIAM; APPLICANT: DIETRICH, WILLIAM; APPLICANT: WATTERS, JAMES W.; TITLE OF INVENTION: ANTHRAX SUSCEPTIBILITY GENE; FILE REFERENCE: 56491(71250); CURRENT APPLICATION NUMBER: US/10/261,175A; CURRENT FILING DATE: 2002-09-30; PRIOR FILING DATE: 2002-09-30; PRIOR FILING DATE: 2001-09-29; NUMBER: DATE: 2001-09-29; NUMBER: PALENTIN VOIS: 23; SOFTWARE: PALENTIN VOIS: 2.1; SEQ.ID NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches:
Conservative:
Mismatches:
                                                                                                                                               20 LysLysGlyAsnProAspGluGluArgLysArgGlnGlu-
                                  (1-7488)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-005-907-2 (1-135) x US-10-261-175A-9 (1-651)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
                                    US-10-005-907-2 (1-135) x US-10-311-455-1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5720 AAAACGCACCACCAACTCGAAAA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127 HisAspTyrGluValValPhe 133
                                                                        14 GluAsnGlnLysLys----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.0514
90.50
36.97%
23.64%
12.66%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Unknown Organism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-261-175A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                             d
                                                                                                                                                                                     셤
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Associated with the Immune System by Determ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTCGTCCTCCTCAGTCCAGAATTACTTTTGGATTCTCTTCAAAAGAAGCTGAAA 870
                                                                                                                                                                                                                                                                                                              610 ATCGGCCAGTCGTTGTTGAAGAAGAACAAGACCCTAACCGAGAGGAACGAGGCTGCTGGAG 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             570 GAG------CAGGTGGAACACATCAGGGAGGAGGTGTCTCAGCTCCGGCATGAGCTG 720
                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 GlyserGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                               41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                      LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721 TCCATGAAGGATGAGCTGCTTCAGTTCTACACCAGCGCTGCGGAGGAG------

    LOCATION: 1, 2, 3, 4, 5, 6, 5250, 5251, 5252, 5253, 5254, 5255, 5256,
    LOCATION: 5257, 5259, 5260, 5261
    CTHER INFORMATION: n = A,T,C or G
US-09-814-353-19577

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7488
29
36
51
31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x US-09-814-353-19577 (1-5261)
                                                                                                                                                     Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: chemically treated genomic US-10-311-455-1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-311-455-1085/C

Sequence 1085, Application US/10311455
; Publication No. US20030143606A1
; GENERAL INFORMATION:
APPLICANT: PIPENBENDCK, Christian
APPLICANT: PIPENBENDCK, Christian
APPLICANT: BIRELIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Asset TITLE OF INVENTION: Diagnosis of Diseases Asset TITLE OF INVENTION: Diagnosis of Diseases Asset TITLE REFERENCE: 5013.1014
; CURRENT APPLICATION NUMBER: US/10/311,455
; CURRENT FILING DATE: 2000-12-16
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR APPLICATION NUMBER: DE 10043826.1
; NUMBER: OF SEQ ID NOS: 2424
; SEQ ID NO 1085
                                                                                                                                      Matches:
                                                                                                                  Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.15
91.50
44.22%
19.73%
                                                                                                                0.702
91.50
47.90%
26.89%
12.80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

φ

```
0.673
91.50
47.90%
26.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            871 GACCTTGAAGAG----
                      TYPE: DNA
; ORGANISM: Homo sapiens
US-10-342-887-1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                     Best Local Similarity:
                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-09-814-353-19577
                                                                                                  Alignment Scores:
                                                                                                                                                                                        Query Match:
DB:
             LENGIH:
                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     염
                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   610 ATCGGCCAGTCGTTGTTGAAGAACAAGACCCTAACCGAGAGGAACGAGCTGCTGGAG 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :::
670 GAG------CAGGIGGAACACAICAGGAGGAGGIGICICAGCICCGGCAIGAGCIG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B11 GAGTCGTCCTCTCAGGAATTACTTTCATTTGGATTCTTTCAAAAGAAGCTGAAA 870
                                                                                                                                                                                                                                                                                                                                                                                                                               1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GlySerGlySerGluGluValCysTyrThrVallleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: He, Yudong
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter S.
APPLICANT: Roberts, Christopher J.
APPLICANT: Nan't Veer, Laura Johanna
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Van Ge Vijver, Marc J.
APPLICANT: Van NUMBER: US/10/342,887
CURRENT APPLICATION NUMBER: 60/289,918
FRIOR APPLICATION NUMBER: 60/289,710
FRIOR APPLICATION NUMBER: 60/380,710
FRIOR FILING DATE: 2002-06-14
FRIOR FILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5109
32
25
45
17
                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                            US-10-005-907-2 (1-135) x US-10-172-118-1552 (1-5109)
                                                                                                                                                                                                                                                                                                                            Mismatches:
                                                                                                                                                                                                                                                                                                                                               Indels:
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 2699
LENGTH: 5109
                                                                                                                                        ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NM 014965
DATABASE ENTRY DATE: 2001-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Sequence 1552, Application US/10342887; Publication No. US20040058340A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                    0.673
91.50
47.90%
26.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               871 GACCTTGAAGAG
                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                         TYPE: DNA
ORGANISM: HOMO
                                                                                                                                                                                                                US-10-172-118-1552
                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
670 GAG------CAGGTGGAACACATCAGGGAGGAGGAGTGTCTCCGGCATGAGCTG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          610 ATCGGCCAGTCGTTGTTGAAGAAGAACAAGACCCTAACCGAGAGGAACGAGCTGCTGGAG 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81 SerLeusersersenaspaspglyTyrGluasnIleaspserreuThrargLysValarg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ---AGTGAGCCCGAGTCCGTTTGCTCAACC--------CCGTTGAAGAGAAT 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       811 GAGTCGTCCTCACAGACTGCAGAATTACTTTGAATTCTCTTCTACAAAAGAAGCTGAAA 870
                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 GlySerGlySerGluGluValCysTyrThrVallleAsnHislleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INCURANTION:

APPLICANT: Lee, John
APPLICANT: Lee, John
APPLICANT: Librageon, Pamela
APPLICANT: Librageon, Pamela
APPLICANT: Librageon, Pamela
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
TITLE APPLICATION NUMBER: US 60/191,031
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-06-15
PRIOR PAPLICATION NUMBER: US 60/211,940
PRIOR PLING DATE: 2000-06-15
PRIOR PAPLICATION NUMBER: US 60/216,920
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR PLING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR PLING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR PLING DATE: 2000-07-05
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR PLING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
PRIOR APPLICATION NUMBER: US 60/257,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GAGAATGTTGTACTTCGATCCGAGGCCAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5109
32
25
45
     Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                  US-10-005-907-2 (1-135) x US-10-342-887-1552 (1-5109)
                                                                                                                                                                                                       Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19577, Application US/09814353
Publication No. US20030165831A1
GENERAL INFORMATION:
```

qq à g

g ò

ò

```
TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients FILE REFERENCE: 9301-175-999
               --- ArgGlnPheArgGluArgSerGluThrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-005-907-2 (1-135) x US-10-263-929-22 (1-2862)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          553 ---Adraagcccaadrccarrigcrcaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1552, Application US/10172118
Publication No. US20030224374A1
GENERAL INFORMATION:
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter
APPLICANT: Linsley, Peter
APPLICANT: Roberts, Chris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Van 't Veer, Laura
Van de Vijver, Marc
Bernards, Rene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91.50
47.90%
26.89%
12.80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) ORGANISM: Homo sapiens
US-10-263-929-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-172-118-1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                            qq
                      à
991 TCATCACGGTCATCACACAAATGCCTTATGGCAAGAGGTAACAAAAGCATTCCATCCTCT 1050
                                                                                                                                                                      1111 GAAGCCGTAGAATTTTTCCAGGATGTTTGCACTAAGCAAAAAGCTCAACTTTG 1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              517 ATGAATTGTCACAAT-----ACTCGAATAATGCAAGACACAGAAAAGGATGATAACAAT 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     571 AATGACGAATATGACAATTACGATGAACTGGTGGCCAAGTCATTGTTAAACCTCGGCAAA 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        337 GACAATGACGAGCCAGGGGATGAGGACGAGGACGAGGAGGGGGGGCCCGGGAGGAGGAG 396
                                                                                                                              97 ArglysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSer 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 GluAsnGlnLysLysProLysLysGlyAsnProAspGluGluArgLysArgGlnGluMet 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34 ThrThrPheGluArgLysLeuGlnAspGlnAspLysSerGlnGluValSerSerThr 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66
                                             96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               397 GAGGAGATCGAGGAGGAGGATGAGGACGATGACGATGGAGAAGATGTGGAGGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 -----CysTyrThrVallleAsnHisIleProHisGlnArgSerSerLeuSerSerAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86 AspAspGlyTyrGluAsnIleAspSerLeuThrArgLysVal-----------
                                          79 ArgserSerLeuSerSerAsnAsp-----AspGlyTyrGluAsnIleAspSerLeuThr
                                                                        Sequence 54, Application US/10115831

Sequence 54, Application WS/10115831

Publication No. US20030219743A1

Septence Invordation

APPLICANT: Liu, Chenghua

APPLICANT: Liu, Chenghua

APPLICANT: Aundi, Unanghua

APPLICANT: Ren, Feiyan

APPLICANT: Ben, Feiyan

APPLICANT: Dimanac, Radoje T.

APPLICANT: Dimanac, Radoje T.

TITLE OF INVENTION: No. US20030219743A1e1 Nucleic Acids and

TITLE OF INVENTION: No. US20030219743A1e1 Nucleic Acids and

TITLE OF INVENTION: No. US20030219743A1e1

TITLE OF INVENTION: No. US20030219743A1e1

TITLE OF INVENTION: NO. US20030219743A1e1

TITLE OF INVENTION: NO. US20030219743A1e1

FILE REFERENCE: 792CIP2ADIV

CURRENT FILING DATE: 2000-09-22

PRIOR APPLICATION NUMBER: 09/667,298

PRIOR APPLICATION NUMBER: 09/677,408

PRIOR FILING DATE: 2000-09-22

PRIOR FILING DATE: 2000-05-18

NUMBER OF SEQ ID NOS: 178

SOFTWARE: PL-Genes Version 2.0

SEO ID NO 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54 SerAsnGluAsnGluAsnGlySerGlySerGluGluVal-----
                                                                                                                                                                                                                                              117 ValSerArgProCysSerCysThrHisGluHisAspTyrGlu 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-005-907-2 (1-135) x US-10-115-831-54 (1-6324)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38.60%
23.68%
12.87%
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: (1)..(3573)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 54 TENGTH: 6324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-115-831-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
```

8 6

8 윱 δ g à

```
81 SerLeuSerSerAsnAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||||||:::
|GAGTCGTCCTCCTCAGTCCAGAATTACTTTCATTTGGATTCTCTTCAAAAGAAGCTGAAA 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MetGlyAsnIyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41 GlnAspGlnAspLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101 GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 LysGlyAsnProAspGluGluArgLysArqGlnGluMetThrThrPheGluArgLysLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    505 rccargaagaargagcrgcrrcagrrcracagcagcaggagg-
US-10-26-929-22

US-10-26-929-22

Sequence 22, Application US/10263929

Sequence 22, Application US/10263929

Sublication No. US20040067535A1

GENERAL INFORMATION:

APPLICANT: Kim, Jaeseob

TITLE OF INVENTION: Alzheimer's Disease Linked Genes

FILE REFERENCE: LSD-07417

CURRENT APPLICATION NUMBER: US/10/263,929

CURRENT FILING DATE: 2002-10-03

NUMBER OF SEQ ID NOS: 213

SOFTWARE: Patentin version 3.2

SEQ ID NO 22

LENGTH: 2862

TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2862
32
25
45
17
```

552

40

US-10-005-907-2 (1-135) x US-10-424-599-8569 (1-1903)  QY  3 ABRITYLEuleuarglysLeuSerCysLeuGlyGluAsnGln	TCCAAAAGGGTCAATTGGATTCAGGGTATGAATCA rgGlnPheArgGluArgSer ::: ATTACTATGAAGGCAAAAATGCAGGGAAAGATCA 115	## APPLICANT: Zhou, Yihua  ## APPLICANT: Zhou, Yihua  ## APPLICANT: Cao, Yongwei  ## TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  ## TITLE OF INVENTION: Plants  ## TITLE OF INVENTION: Plants  ## TITLE OF INVENTION: Plants  ## TITLE OF INVENTION: Plants  ## TITLE OF INVENTION: Plants  ## TITLE OF INVENTION: Plants  ## CURRENT APPLICATION NUMBER: US/10/425,115  ## CURRENT APPLICATION NUMBER: US/10/425,115  ## CURRENT PLING DAR: 2033-04-28  ## TITLE OF INVENTION: See mays  ## TITLE OF INVENTION: Clone ID: MRT4577_66076C.1  ## US-10-425-115-147532	Alignment Scores:     Pred. No.:     Scores:     Scores:     Scores:     Scores:     Scores:     Scores:     Percent Similarity:     Percent Similarity:     Scores:     Score	Oy 21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
NAME/KEY: LOCATION: -10-242-943 ignment Sco: ed. No.: crent Simil: st Local Simils st Local Simil: -10-005-907.	Db   77   GAGGAGCAGGAGGAGGAGGAGGAGGAGCAGGAGCAGGAGG	Qy         93 AspSerLeuThrArgLysValArgGlnPheArgGluArgSerGluThrGlu 109           Db         317 GAGCGCCTCCAGCGAGAAGTTGAGGGAAAGGCGGCCCGGGAACAGGCTGAGGTGAG 376           Qy         110 TyrAlaLeuLeuArgThrSerVal 117           Db         377 GTGGCCTCCTTGAACCGTAGGATC 400           RESULT 6         US-10-424-599-8569           ; Sequence 8569, Application US/10424599           ; Publication No. US20040031072A1           ; APPLICANT: La Rosa Thomas J           ; APPLICANT: Kovalic David K	APPLICANT: Zhou Yihua APPLICANT: Zhou Yihua TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Boy Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(5322)B CURRENT PAPLICATION NUMBER: US/10/424,599 CURRENT FILING DATE: 2003-04-28 NUMBER OF SEQ ID NOS: 285684 SEQ ID NO 8569 LENGTH: 1903 TYPE: DNA ORGANISM: Glycine max FEATURE: FEATURE: COTHER INFORMATION: Clone ID: PAT_MRT3847_107747C.1	lignment Scores: 0.108 red. No.: 93.00 ercent Similarity: 43.338 est Local Similarity: 13.008 uery Match: 16.018

PALM. or

```
-----GluAsnIleAspSerbeuThrArgLysValArgGlnPheArgGlu--- 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --- ArgSerGluThrGluTyrAlaLeuLeuArg 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 LeuleuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                                                                                                                                                                                                                                                                                                                                                                    572 CTCCTACAATCCTCCTTGTCCCTGGGAAGCCAGGAGCAAGCGCCAGAGCACAAGCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  45 LysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65 GluGlu------ValCysTyrThrVallleAsnHislleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Nandabalan, Krishnan
APPLICANT: Schulz, Vincent P.
APPLICANT: Schulz, Vincent P.
APPLICANT: Yang, Meija
TITLE OF INVENTION: NIXI PROTEIN AND NIXI PROTEIN COMPLEXES
FILE REPERBENCE: 15966-521 NIXI protein complexes
CURRENT APPLICALION NUMBER: US/10/242,943
CURRENT FILING DATE: 2002-09-13
PRIOR FILING DATE: 1998-03-19
Remaining Prior Application data removed - See File Wrapper -
NUMBER OF SEQ ID NOS: 470
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 90
LENGTH: 1892
                                                                                                                                                                                                              1892
36
21
62
30
                                                                                                                                                                                                                                                 Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                 US-10-005-907-2 (1-135) x US-10-653-595-90 (1-1892)
                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        992 crecceaeacaeaecerrecreeree 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81 ---SerLeuSerSerAsnAspAspGlyTyr--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US/09/167,206
PRIOR FILING DATE: 1998-10-06
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        115 ThrSerValSerArgProCysSerCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/10242943; Publication No. US20030087412A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                     98.00
38.26%
24.16%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                             ORGANISM: Homo sapiens
US-10-653-595-90
                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 2301
                                                                                                                                                                                                      Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-242-943-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                         No.:
                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104
                                                                                                                                                                                                                                                                                                                                                       632 CAAGGAGTGGAGCACAĠĠĊĀĠĠĠĠĠĠĠĠĠĠĠĠĠĠĀĀGAAGGAGGĀĞĀĀĀ 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |||::::::
932 aatgaaatatatgatgagaactcctactggagaaccaaaaccctgggagcctcctggag 991
                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                    25 AspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeuGlnAspGlnAsp 44
                                                                                                                                                                                                                                                                                                                                                                                            45 LysLysSerGinGluValSerSerThrSerAsnGlnGluAsnGluAsnGlySerGlySer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----GluasnileAspSerLeuThrargLysValArgGlnPheArgGlu---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           872 CCTATGATAATGGAGAACATCCAGGAGCTCATTCGATCAGCCCAGGAAATAGATGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------ArgSerGluThrGluTyrAlaLeuLeuArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65 GluGlu-------ValCysTyrThrVallleAsnHisIleProHisGlnArgSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81 ---SerLeuSerSerAsnAspAspGlyTyr-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        752 AAGGAGGGACGGAGGCTGTGTCTCAGCTGCAGACTCAGAGCCCAAAGTTTCACTCT
                                                                                                                                                                                                                                           5 LeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLysLysGlyAsnPro
                                                                        1892
36
21
62
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-23-23-39
US-10-23-23-39
Sequence 90, Application US/10653595
PUblication No. US20040048304A1
GENERAL INFORMATION:
APPLICANT: Ruben et. al.
TITLE OF INVENTION: 95 Human secreted proteins
FILE REFERENCE: PZ027P1C1
FILE REFERENCE: P2027P1C1
FILE REFERENCE: P203791C1
FRICK PRIOR TAPPLICATION NUMBER: US/10/653,595
CURRENT APPLICATION NUMBER: US 09/397945
PRIOR FILING DATE: 1999-03-19
PRIOR FILING DATE: 1999-03-18
PRIOR FILING DATE: 1999-03-19
PRIOR FILING DATE: 1999-03-19
PRIOR FILING DATE: 1999-03-19
PRIOR FILING DATE: 1998-03-19
PRIOR FILING DATE: 1998-03-19
PRIOR PLING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR FILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR FILING DATE: 1998-04-01
PRIOR PRILICATION NUMBER: 60/078,578
PRIOR PILING DATE: 1998-04-01
PRIOR PILING DATE: 1998-04-01
PRIOR PILING DATE: 1998-04-01
                                                                                                             Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                        US-10-005-907-2 (1-135) x US-09-397-945-90 (1-1892)
                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  992 CIGCCCCACACAGAGCCTTGCTGGTGC 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115 ThrSerValSerArgProCysSerCys 123
                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/078,578
                                                                                            98.00
38.26%
24.16%
13.71%
                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
US-10-653-595-90
                                                            Alignment Scores:
                     US-09-397-945-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105
                                                                                                                                                       Query Match:
DB:
                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

931

751

64

44

24

811

89

```
355 AGGAAGAGGATGCTTCGCATGTGGGGAAAGGCCCACTTCAGGGACAACTGTCCAAAT 414
                                                                                                                                                                                                     415 ATGGCCAAACCCAAAAAGGAGAGGCAAAGGCAAGACGCTAACAAGTGTTAGAACTTGG 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97 ArglysValArgGlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSer 116
                                                                                                                                                                                                                                                                                   475 GATGATTCTTCAAGTGAAGATGAACCTCCAAGTACACGCAGCCACCGGTCCTCATCACGC 534
                                                                                                                                                                                                                                                                                                                                                                            335 TCAİCACGGİCATCACACAAAİGCCTTATGGCAAGAGGTAACAAAAGCAİTİCCATCCTCG 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                   655 GAAGCCGTAGAATTTTTCCAGGATGTCTGCACCAAGGAAAAGCTCAACTTAAAACTTTG 714
                                                                                                                                                             21 LysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                41 GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                    61 GlySerGlySerGluGluValCysTyrThrVallleAsnHis-----IleProHisGln 78
                                                                                                                                                                                                                                                                                                                                                                                                                      79 ArgSerSerLeuSerSerAsnAsp-----AspClyTyrGluAsnIleAspSerLeuThr 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           117 ValSerArgProCysSerCysThrHisGluHisAspTyrGluValVal 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          115 AAAAATAAGTTGATTAGC-----TCCCAAAATGATTATAAAGAAGTG 756
                                   US-10-005-907-2 (1-135) x US-10-425-115-147529 (1-1173)
                                                                           7 ArglysleuSerCysleuGlyGluAsnGlnLysLys----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Human Genome Sciences, Inc. et al.
ITILE OF INVENTION: 95 Human secreted proteins
CURRENT APPLICATION WUMBER: US/09/397,945
CURRENT PILING DATE: 1999-09-17
PRIOR APPLICATION NUMBER: US/09/397,945
PRIOR PILING DATE: 1999-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR APPLICATION NUMBER: 60/078,563
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
PRIOR PILING DATE: 1998-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 90, Application US/09397945
Publication No. US20030065139A1
GENERAL INFORMATION:
                                                                                                          g
                                                                                                                                                             8
                                                                                                                                                                                                 gg
                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 147529, Application US/10425115
Fublication No. US20040214272A1
GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Number 0302104025,115
CURRENT APPLICATION NUMBER: US)10/425,115
CURRENT APLICATION NUMBER: US)2228
NUMBER OF SEQ ID NOS: 369326
SEQ ID NOS: 369326
                                                                                                                                                                                                                                                                                                                                                                                                                                      SerLeuSerSerAspAspAspGlyTyrGluAsnIleAspSerLeuThrArgLysValArg 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnPheArgGluArgSerGluThrGluTyrAlaLeuLeuArgThrSerValSerArgPro 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTITAGAGAAAGGTCAGAGACAGAATATGCCCTTCTTAGGACTTCTGTTAGTAGGCCT 384
                                                                                                                                                                                                                                                                                                                                                    25 ATGGGAAATTATCTCCTGCGAAAACTCAGTTGCCTGGGAGAGAATCAAAAGAAGCCCAAG 84
                                                                                                                                                                                                                                                                                                                                                                                                         21 lysGlyAsnProAspGluGluArgLysArgGlnGluMetThrThrPheGluArgLysLeu 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnAspGlnAspLysLysSerGlnGluValSerSerThrSerAsnGlnGluAsnGluAsn 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlySerGlySerGluGluValCysTyrThrValIleAsnHisIleProHisGlnArgSer 80
                                                                                                                                                                                                                                                                                                                       1 MetGlyAsnTyrLeuLeuArgLysLeuSerCysLeuGlyGluAsnGlnLysLysProLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerCysThrHisGluHisAspTyrGluValValPheProHis 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3762
135
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1173
33
24
67
12
                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                        US-10-005-907-2 (1-135) x US-10-005-907-1 (1-3762)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: Clone ID: MRT4577_66073C.1
US-10-425-115-147529
                                                                                                                                                                                                                     Indels:
                                                                                                                              9e-83
715.00
100.00%
100.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98.00
41.91%
24.26%
13.71%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0122
; NAME/KEY: CDS
; LOCATION: (25)..(432)
; OTHER INFORMATION:
US-10-005-907-1
                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-425-115-147529
                                                                                                      Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
RESULT 1
US-10-005-907-1
                                                  89.5
89.5
89.5
89.5
                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
                                                                                                           Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                    (without alignments)
478.354 Million cell updates/sec
                                                                                                                                                                                                        US-10-005-907-2
715
1 MGNYLLRKLSCLGENQKKPK......SVSRPCSCTHEHDYEVVFPH 135
                                                                                                                               November 19, 2004, 02:51:09 ; Search time 1525 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published Applications NA:*

1. /cgn2_6/ptodata/2/pubpna/USO7 PUBCOWB.seq:*
2. /cgn2_6/ptodata/2/pubpna/USO7 PUBCOWB.seq:*
3. /cgn2_6/ptodata/2/pubpna/USO6_NEW PUB.seq:*
4. /cgn2_6/ptodata/2/pubpna/USO6_PUBGOWB.seq:*
5. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
6. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
7. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
8. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
9. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
10. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
11. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
12. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
13. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
14. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
15. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
16. /cgn2_6/ptodata/2/pubpna/USO8_NEW PUB.seq:*
17. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
17. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
18. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
19. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
20. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
20. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
21. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
22. /cgn2_6/ptodata/2/pubpna/USO8_PUBCOWB.seq:*
                     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                              nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                             3627888 segs, 2701811610 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                    Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Command line parameters:
                                                                                                                                                                                                                                                                                     BLOSUM62
                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                    ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
                                                                                                  OM protein
                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                      Run on:
```

```
19617, A
18802, A
18720, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83303, A
147531,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73, Appl
576, App
576, App
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1557, Applements 1557, Applements 1957, Applements 1957, Applements 9, Applements 9, Applements 64985, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 19372, Applements 193722, Applements 19372, Applements 19372, Applements 19372, Appleme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           268, App
49, Appl
                                                                                                                                                                                                 90, Appl
3, Appli
8569, Ap
147532,
                                                                                  Seguence 1, Appli
Seguence 147529,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12896,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19622,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19617
                                                                                                                                                                                                         Sequence 90,
                                                                                                                                                                                                                                                Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                      US-10-005-907-1
US-10-005-907-1
US-10-425-115-147529
US-10-653-595-90
US-10-623-595-90
US-10-242-943-3
US-10-424-193-8659
US-10-424-193-8659
US-10-424-193-8659
US-10-424-193-1957
US-10-115-811-54
US-10-172-118-1552
US-10-172-118-1552
US-10-173-118-1552
US-10-26-115-633
US-10-26-115-633
US-10-26-115-633
US-10-26-1175A-9
US-10-26-113-260
US-10-26-113-260
US-10-26-118-633
US-10-027-621-118
US-10-037-270-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-17-722-130
US-10-424-593-118-19612
US-10-437-963-18802
US-10-437-963-18802
US-10-437-963-18120
US-10-007-805-576
US-10-007-805-576
US-10-457-963-41655
US-10-451-533-721
US-10-415-134-3
Query
Match Length DB
                                                                                                                                      111073
18922
19822
19822
19822
19822
19822
19823
11173
11173
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
11071
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
1071
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
10711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81440
123192
```

## ALIGNMENTS

```
RESULT.

US-10-005-907-1

US-10-005-907-1

Sequence 1, Application US/10005907

Publication No. US20030166881A1

GENERAL INFORMATION:

APPLICANT: Union Chimique Belge, S.A.

APPLICANT: No. US20030166881Alka, Karl

APPLICANT: Pirozzi, GENEGORY

APPLICANT: Einstein, Richard

TITLE OF INVENTION: NOVEL GENES ASSOCIATED WITH ALLERGIC HYPERSENSITIVITY AND MAST

TITLE OF INVENTION: ACTIVATION

FILE REFERENCE: 053529-5005

CURRENT FILING DATE: 2001-12-07

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentin Version 3.1

SOFTWARE: Patentin Version 3.1

SEQ ID NO 1

LENGTH: 3762

TYPE: DNA

ORGANISM: Homo sapiens

PEATURE:

PEATURE:
```

SUMMARIES